

Music Creation Using Audacity - Activity 5

Record producers and DJs often create their own unique versions of recognisable songs by rearranging the sections, adding effects, extending sections, and inserting new sounds. This activity will guide you through some of the techniques used in creating a 'remix'.

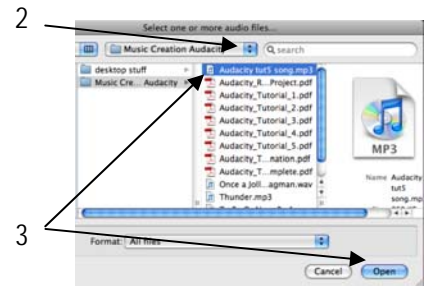
1A Load Song

1. File Menu>Open.
Move the pointer to the Audacity file menu, then select open.

2. Locate the Music Creation Audacity resource folder.
Use the finder window navigation browser and follow your teachers directions

3. Select 'Audacity tut5 song.mp3' and click Open

4. Click Play and Listen.
Move the pointer to the Control Toolbar and press the green play button or press the computer keyboard spacebar.

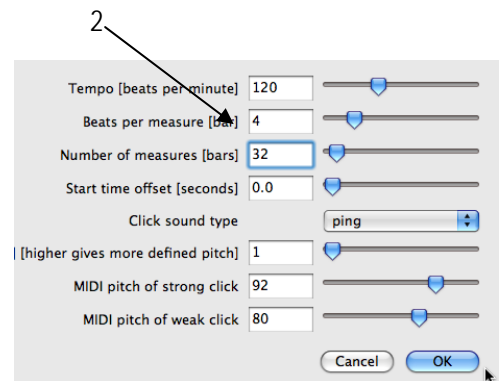
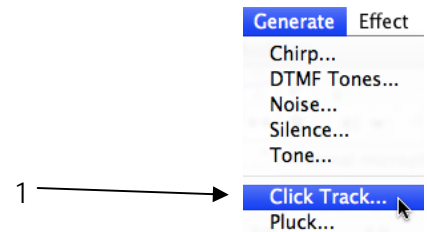


1B Create Reference Click

A click track provides a tempo reference for the song. You will often need to use trial and error to detect the average tempo of a pre-recorded song, however, in this activity it was recorded at 120 BPM (Beats Per Minute).

1. Generate Menu>Click Track.
Move the pointer to the Generate menu and select Click Track.. A new window will open.

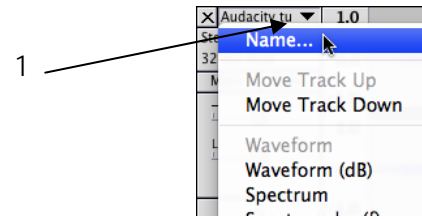
2. Type in the values as shown and then click OK.
 - Tempo = 3 dB
 - Beats per measure = 4
 - Number of measures = 32
 - Start time = 0.0
 - Click sound type = ping
 - Noise click res. = 1
 - MIDI pitch strong = 92
 - MIDI pitch weak = 80



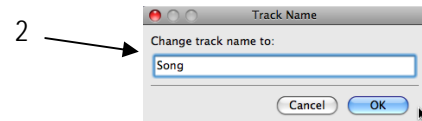
1C Name Tracks and Close Track Menu

You will now rename each track so that each is easy to identify.

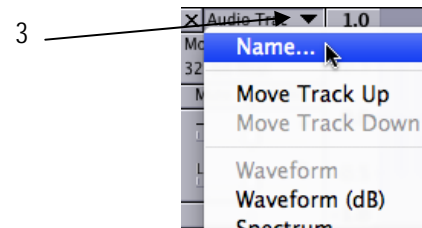
1. Open the Track menu for the first track.
Move the pointer to the far left side of the project window and on the first track, click on the inverted triangle. A track menu will open.



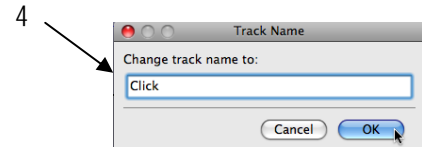
2. Click on the heading Name and rename the track 'Song'.
Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Song' then click OK.



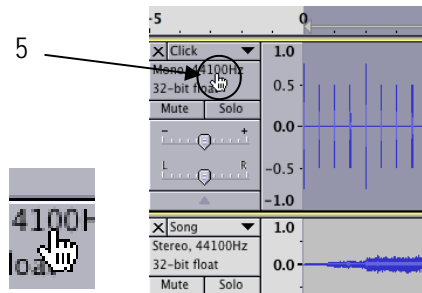
3. Open the Track menu for the second track.
Move the pointer to the far left side of the project window and on the first track, click on the inverted triangle. A track menu will open.



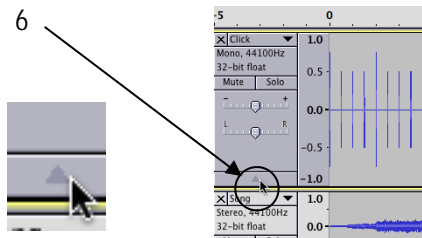
4. Click on the heading Name and rename the track 'Click'.
Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Click' then click OK.



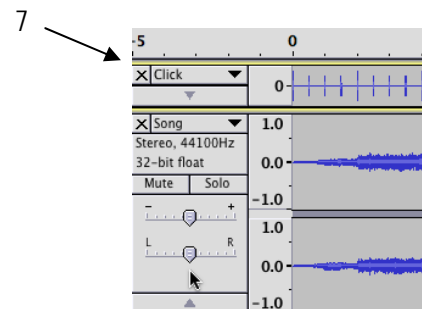
5. Move the Click track above the Song track.
Move the pointer to the Click track and click-hold on the text 'Mono, 44100Hz'. The track will turn dark grey and the pointer will become a pointing hand. Click-Hold and drag the track above the Song track..



6. Minimize the Click track menu and track width.
Move the pointer to the Click track menu and locate the triangle on the lower edge of the menu. Click on it.



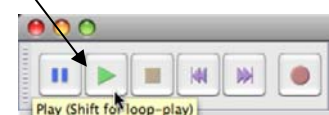
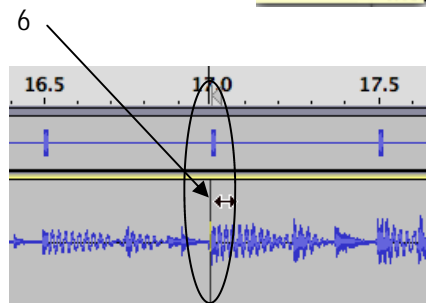
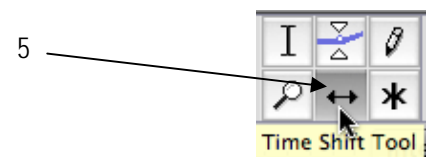
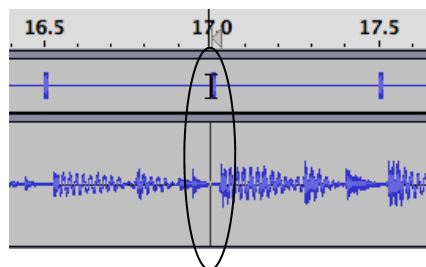
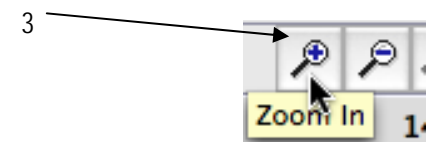
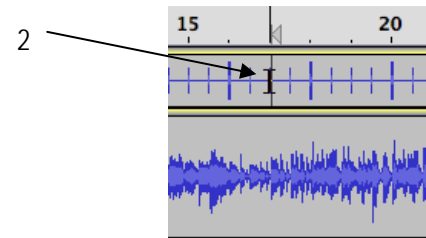
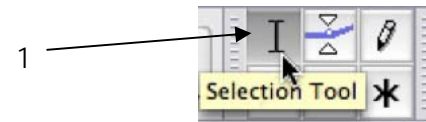
7. The Project window should resemble this



1D Synchronising the Click and Song

When you listened to the Click and Song together you may not have noticed but the click and the song rhythm gradually drift apart. For the remix to sound effective we need to correct this. You will focus upon a snare roll at the 17 second mark of the Song track and drag it to the left to match the click track pulse.

1. Activate the Selection Tool.
Move the pointer to the Tools Toolbox and select the capital I located in the upper left corner.
2. On the Click track, click at the 17 second marker.
Move the Selection Tool pointer to the Click track and click just below the timeline ruler.
3. Use the Zoom to enlarge and position the 17 second mark so that the half seconds are visible.
5. Activate the Time Shift Tool.
Move the pointer to the Tools Toolbox and select the two arrows located in the lower middle.
6. Use the time shift tool to gently drag the Song track to the left so that the snare drum roll aligns with the reference Click track.
7. Reset the Playhead to the start of the project, click play and listen to your efforts.

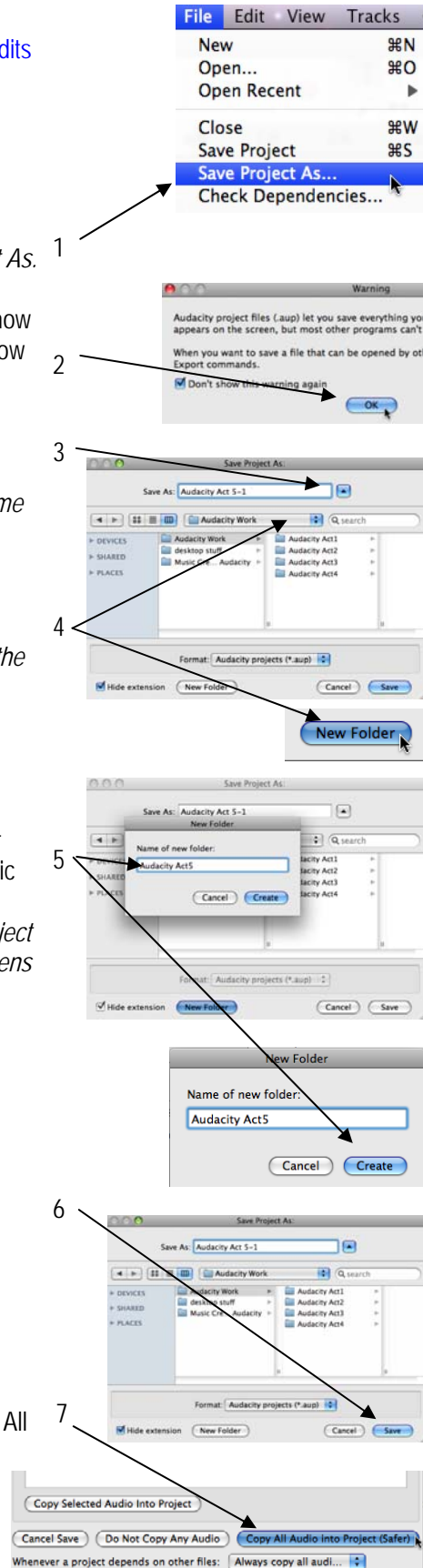


The change is subtle, however, the two tracks now aurally and visually synchronise better. In longer songs, this re-alignment may be required every 8 or 16 measures and requires the original song track to be split into shorter audio regions.

1E Saving Your Work

This allows your audio project with all of its various sounds and edits to be saved for later editing. This is a large file size so make sure you have enough storage space in your personal storage area or USB memory stick.

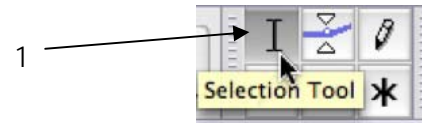
1. File Menu>Save Project As.
Move the pointer to the file menu, then select Save Project As.
2. Should a warning window open, read it, then click 'Don't show this warning again.' Then click OK. A Save Project As window will open.
3. Name the Project 'Audacity Act 5-1'.
Move the pointer to the Save As text area and type the name 'Audacity Act 5-1'.
4. Locate the 'Audacity Work' folder you created in Activity 1
Move the pointer to the column view and then navigate to the 'Audacity Work' area.
5. Within the 'Audacity Work' folder create another new folder and title it 'Audacity Act 5'. This will be where the first Music Creation using Audacity tutorial will be saved.
Move the pointer to the New Folder button in the Save Project As window and click.. A New Folder dialogue window opens and type the name 'Audacity Act 5'. Then click Create.
6. Click Save.
7. Should a warning window open, move the pointer to 'Copy All Audio into Project (Safer)' and click..



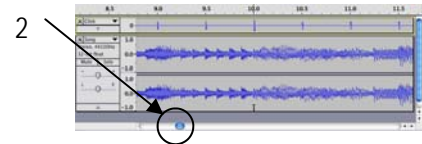
2A Beat Accurate Selection Editing (Start)

You will now select a four measure section of the Song that must be beat perfect in its start and end points if the remix is to have a steady pulse.

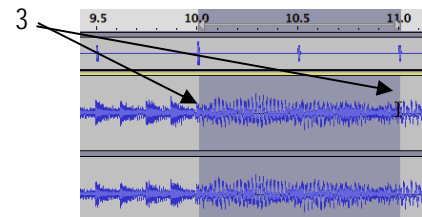
1. Activate the Selection Tool.
Move the pointer to the Tools Toolbox and select the capital I located in the upper left corner.



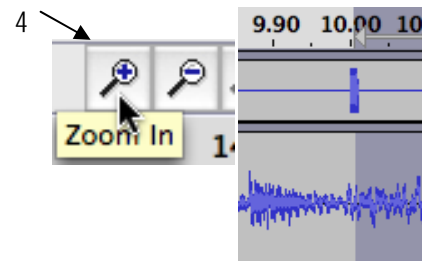
2. Use the Horizontal scroll bar to position the 10 second mark in the middle of the Project Window.



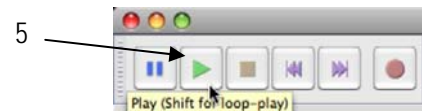
3. At approximately the 10 second mark, Click-Hold the Selection Tool on the Song track and drag to the 11 second mark.



4. Use the 'Zoom In' to enlarge the audio region around the 10 second mark so that the timeline ruler shows tenths of seconds (9.80-9.90-10.00-10.10 etc.)

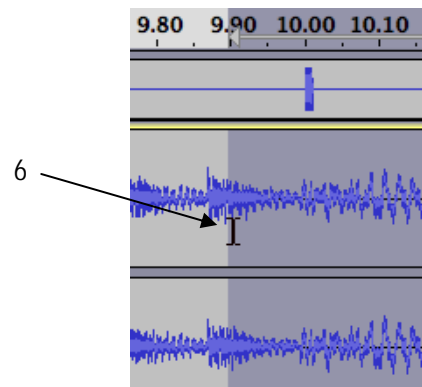


5. Press Play to listen to your selection.

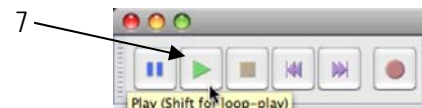


You are seeking an accurate 'downbeat' start for the crash cymbal, bass guitar and kick drum. Your selection may sound 'good enough' however, the selection must be beat accurate if a steady pulse is to be achieved for the remix. You will now shift the selection slightly before the downbeat so that you can hear the difference

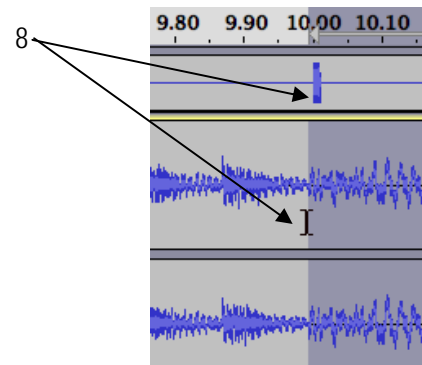
6. Hold the Shift key then Click-Hold and drag the left edge to the 9.90 second mark while still retaining the right edge selection at the 11 second mark



7. Press play and now listen to your selection.



- 2A** 8. Re-adjust the start selection at the 10 second mark by holding the Shift key and drag the left edge selection so that the cymbal, bass and kick beat are the first sounds heard in the selection. (This is just before the 10 second marker on the Click track)

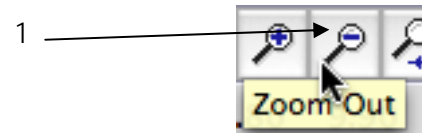


9. Press play to listen and check your selection. Readjust if required.

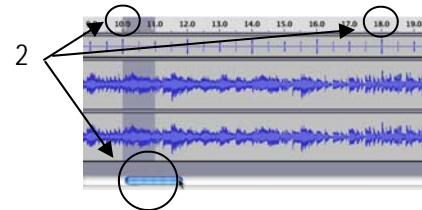


2B Beat Accurate Selection Editing (Ending)

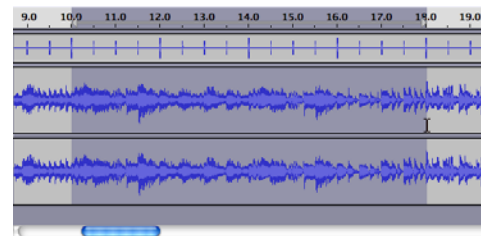
1. Use the 'Zoom Out' to enlarge the audio region around the 10 second mark so that the timeline ruler shows whole seconds (9-10-11 etc.)



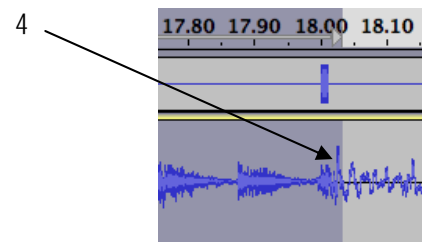
2. Use the Horizontal scroll bar to position the 10 and 18 second mark in the middle of the Project Window.



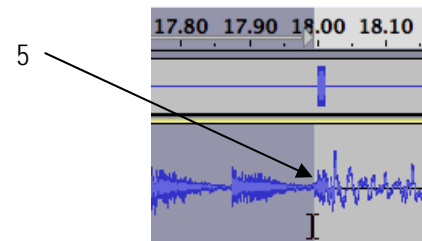
3. Shift-Click-Hold and drag the right selection to the 18 second mark.



4. Use the 'Zoom In' to enlarge the audio region around the 10 second mark so that the timeline ruler shows tenths of seconds (17.90-18.00-18.10 etc.)



5. Make any adjustments as required using the Shift-Click-Hold and drag method so that you have an accurate ending (with crash cymbal) and an end point (no crash cymbal).



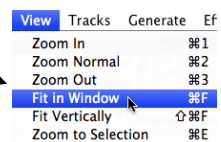
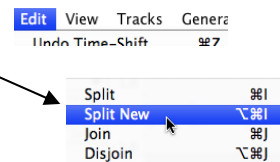
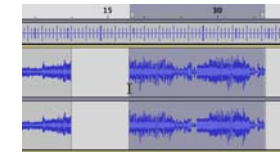
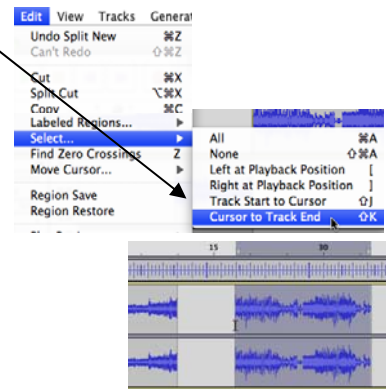
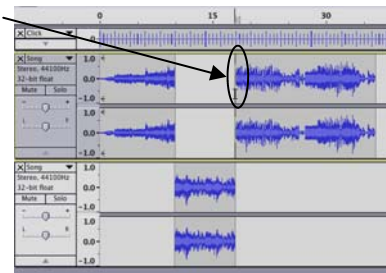
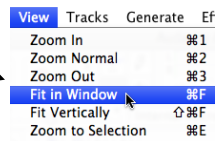
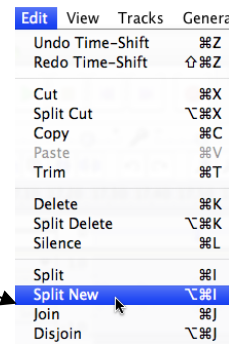
6. Press play to listen and check your selection. Re-adjust if required.



2C Splitting Tracks

The selected region is now beat accurate and contains 4 measures of music. You will now split this from the original song and place it onto its own track

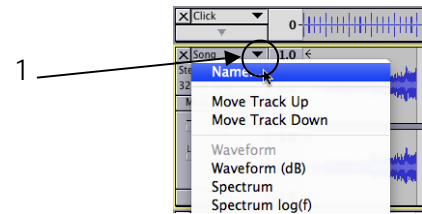
1. The selection from activity 2B should still be active
2. Edit>Split New
Move the pointer to the Edit menu and click Split New. The selected region is now placed onto its own track
3. View>Fit in Window
Move the pointer to the View Menu and select Fit in Window so that all tracks are visible.
4. On the Song track, click the Selection tool at the start of the second audio region (18 second mark)
5. Edit>Select>Cursor to Track End
6. Edit>Split New
Move the pointer to the Edit menu and click Split New. The selected region is now placed onto its own track
7. View>Fit in Window
Move the pointer to the View Menu and select Fit in Window so that all tracks are visible.



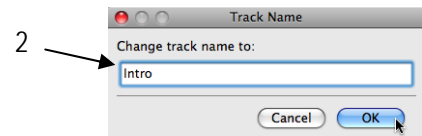
2D Rename Tracks

You will now rename each of the Song tracks so that each is easy to identify.

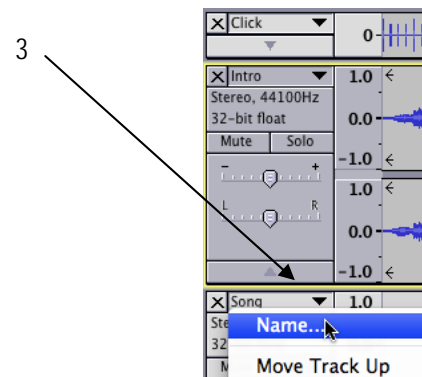
1. Open the Track menu for the second track (first Song track). Move the pointer to the far left side of the project window and on the second track, click on the inverted triangle. A track menu will open.



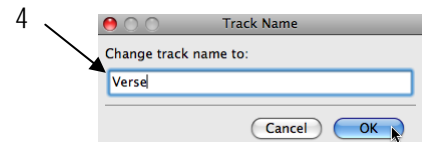
2. Click on the heading Name and rename the track 'Intro'. Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Intro' then click OK.



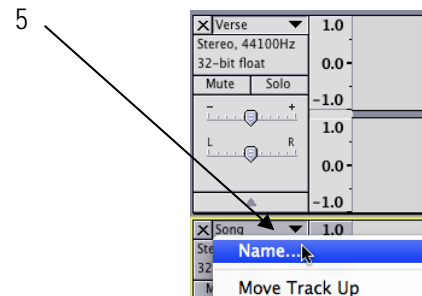
3. Open the Track menu for the third track (second Song track). Move the pointer to the far left side of the project window and on the third track, click on the inverted triangle. A track menu will open.



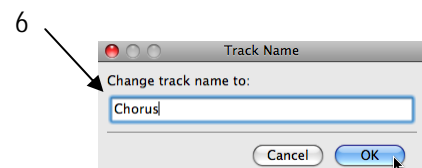
4. Click on the heading Name and rename the track 'Verse'. Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Verse' then click OK.



5. Open the Track menu for the fourth track (third Song track). Move the pointer to the far left side of the project window and on the third track, click on the inverted triangle. A track menu will open.



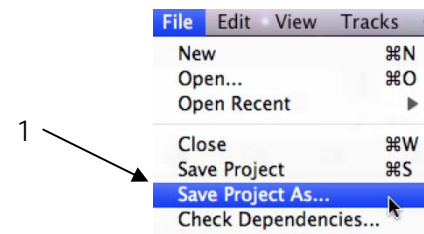
6. Click on the heading Name and rename the track 'Chorus'. Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Chorus' then click OK.



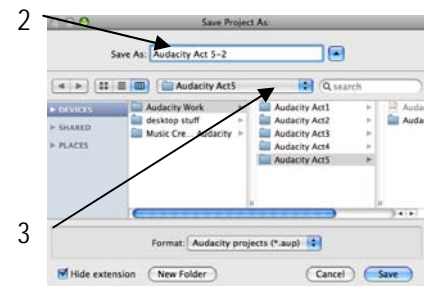
2D Saving Your Work

This allows your audio project with all of its various sounds and edits to be saved for later editing. This is a large file size so make sure you have enough storage space in your personal storage area or USB memory stick.

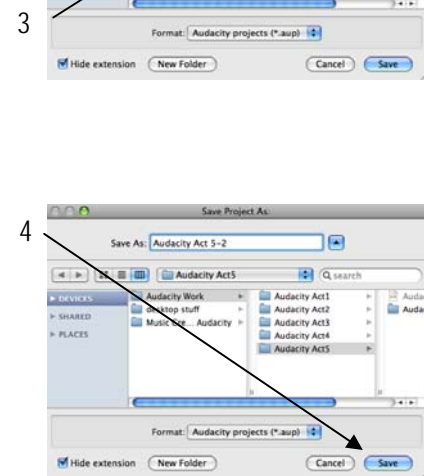
1. File Menu>Save Project As.
Move the pointer to the file menu, then select Save Project As.



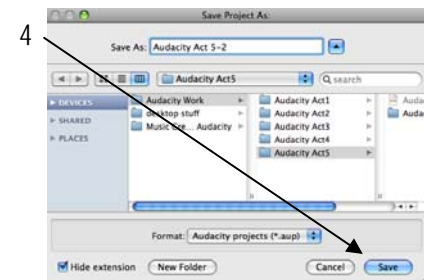
2. Name the Project 'Audacity Act 5-2'.
Move the pointer to the Save As text area and type the name 'Audacity Act 5-2'.



3. Locate the 'Audacity Work' folder created in Activity 5 Part 1E. to save your work.
Move the pointer to the column view and then navigate to the 'Audacity Work' folder created in Activity 5 Part 1E



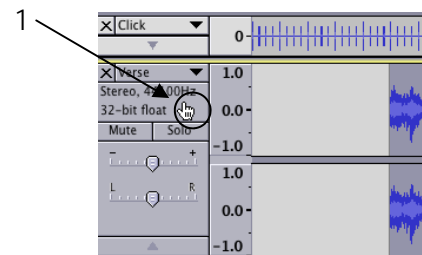
4. Click Save.



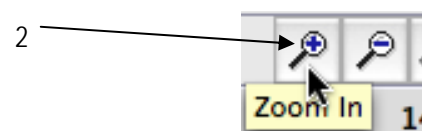
3A Creating Space

You will move the verse track so that a 1 measure space (2 seconds) is created between the Verse and Intro tracks.

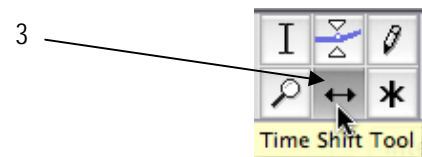
1. Move the Verse track underneath the Click track
Move the pointer to the Verse track and click-hold on the text 'Mono, 44100Hz'. The track will turn dark grey and the pointer will become a pointing hand. Click-Hold and drag the track above the Intro track..



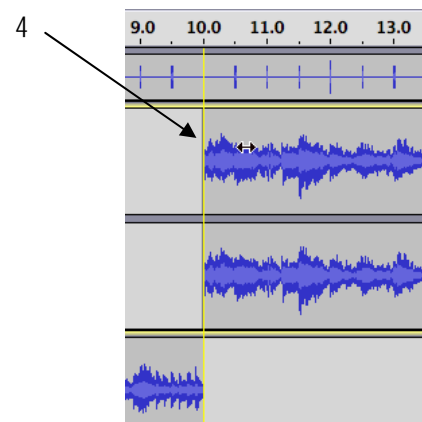
2. Use the zoom control so that the second markers 11 and 12 are easily seen in the timeline ruler.



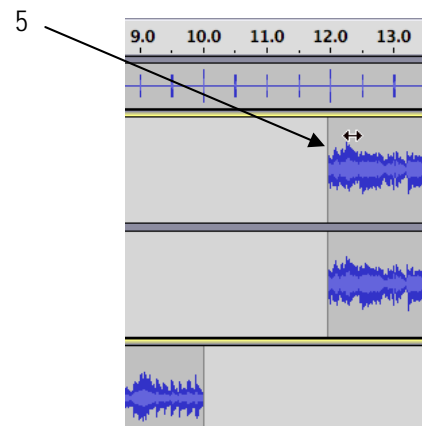
3. Activate the Time Shift Tool.
Move the pointer to the Tools Toolbox and select the two arrows ↔ located in the lower middle.



4. Click with the Time Shift Tool on the Verse track at the 10 second mark and Drag the Verse 1 track 4 beats to the right (1 measure) so that it's starting position is at the 12 second mark



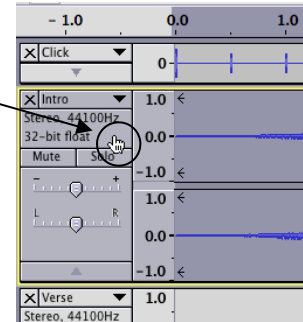
5. The Project Window should resemble this.



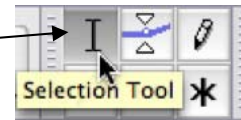
3B Filling the Silence with a Delay Effect

You will select the final 2 seconds of the Intro track containing the text 'Hello People'. You will then put a Delay/Echo effect on it so that the 1 measure of silence created in 3A is filled with an echo.

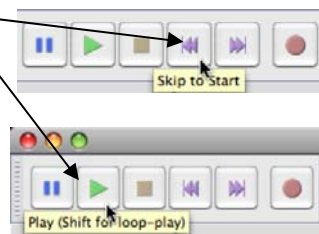
1. Move the Intro track underneath the Click track
Move the pointer to the Intro track and Click-Hold on the text 'Mono, 44100Hz'. The track will turn dark grey and the pointer will become a pointing hand. Click-Hold and drag the track directly beneath the Click track.



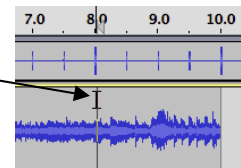
2. Activate the Selection Tool.
Move the pointer to the Tools Toolbox and select the capital I located in the upper left corner.



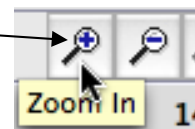
3. Reset the Playhead to the start and press stop when you hear the words 'Hello People'.



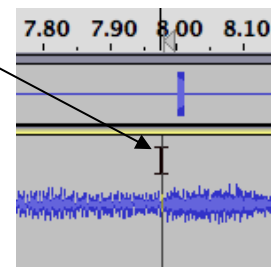
4. On the Intro track, click with the selection tool at the start of the 'Hello People' text (approximately the 8 second mark)



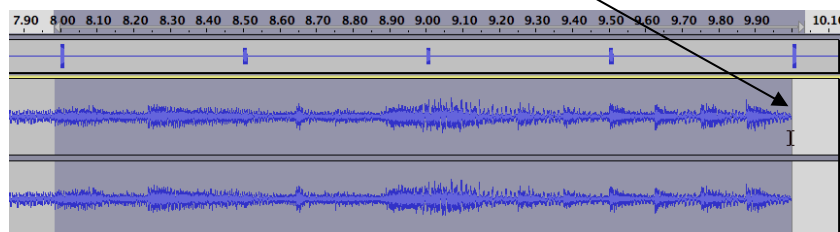
5. Use the Zoom In control so that second markers 7.80-8.00 are easily seen in the timeline ruler.



6. Click play several times to check that you accurately have the start point. Move the Selection tool as required (slightly before 8.00)

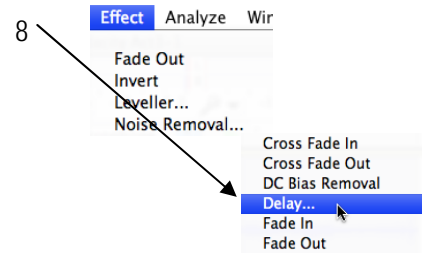


7. Click-Hold and Drag the selection to the end of the audio region at the 10 second mark.



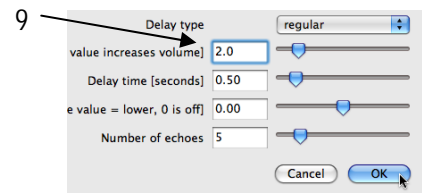
3B Filling the Silence with a Delay Effect

8. Effect>Delay.
Move the pointer to the Effect menu and select Delay from the dropdown list.. A new Delay window will open.

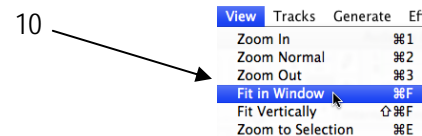


9. Type in the values as shown and then click OK

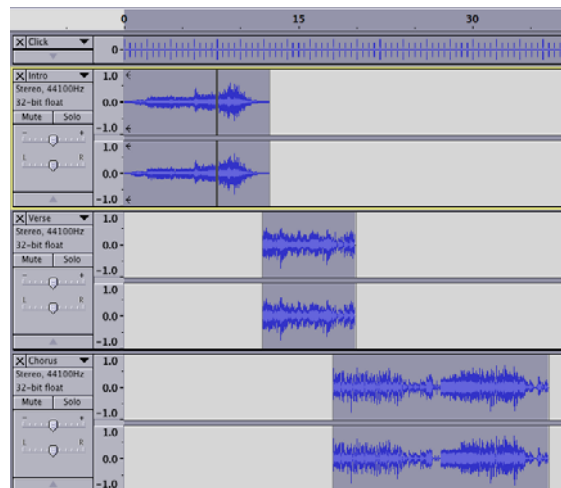
- Delay Type = regular
- Decay amount = 2.0 dB
- Delay Time = 0.5
- Pitch Change = 0.00
- Number of echoes = 5



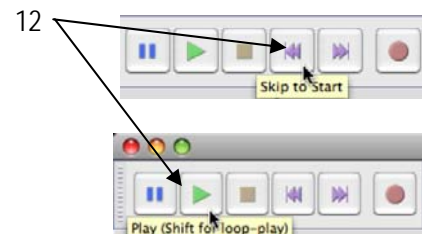
10. View>Fit in Window
Move the pointer to the View Menu and select Fit in Window so that all tracks are visible.



11. The Project Window should resemble this.



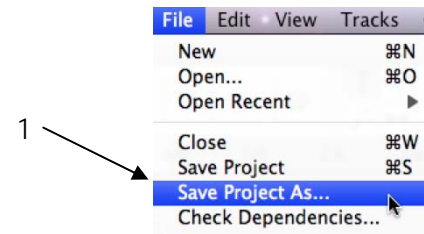
12. Reset the Playhead to the start of the project, click play and listen to your efforts.



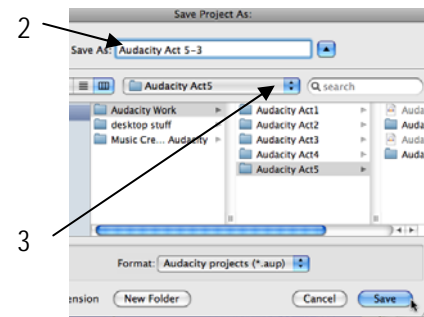
3C Saving Your Work

This allows your audio project with all of its various sounds and edits to be saved for later editing. This is a large file size so make sure you have enough storage space in your personal storage area or USB memory stick.

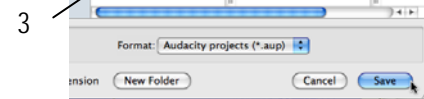
1. File Menu>Save Project As.
Move the pointer to the file menu, then select Save Project As.



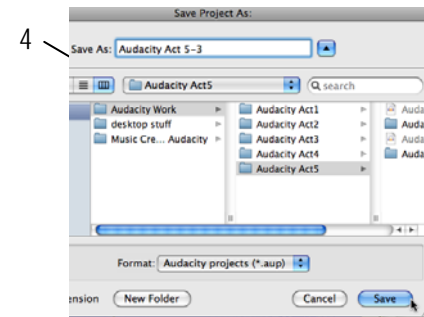
2. Name the Project 'Audacity Act 5-3'.
Move the pointer to the Save As text area and type the name 'Audacity Act 5-3'.



3. Locate the 'Audacity Work' folder created in Activity 5 Part 1E. to save your work.
Move the pointer to the column view and then navigate to the 'Audacity Work' folder created in Activity 5 Part 1E



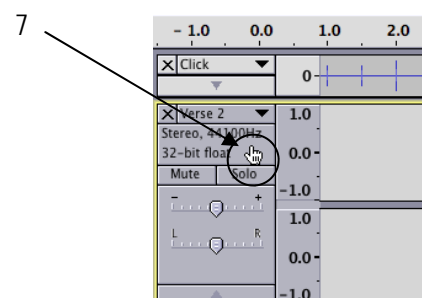
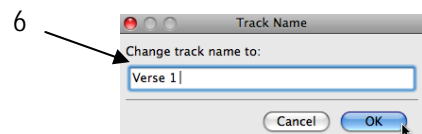
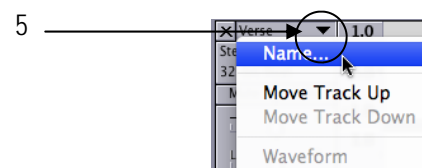
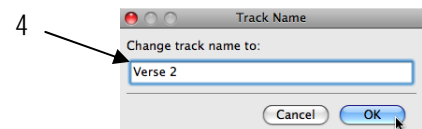
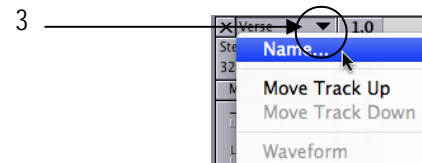
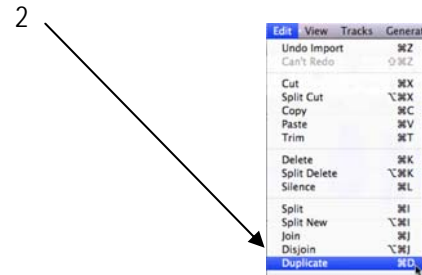
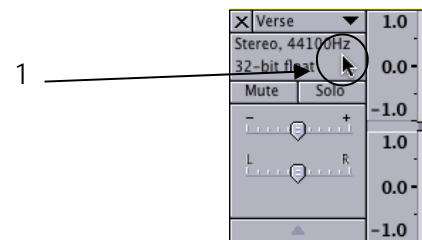
4. Click Save.



4A Extending the Verse Track

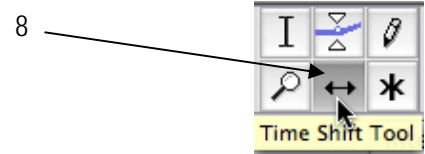
A remix usually contains extended and altered sections from the original song. We will duplicate the Verse track and then use an EQ effect to create a poor quality AM Radio sound.

1. Select the track titled 'Verse'.
Move the pointer to just above the Solo button (not on the Solo button though) and click. The track will turn a dark grey.
2. Edit Menu>Duplicate.
Move the pointer to the Edit Menu and select Duplicate. A second track is inserted into the Project Window.
3. Locate the newly created duplicated Verse track and click on the track menu (final track of the Project Window).
4. Click on the heading Name and rename the track 'Verse 2'.
Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Verse 2' then click OK.
5. Open the Track menu for the original Verse track.
Move the pointer to the far left side of the project window and on the Verse track, click on the inverted triangle. A track menu will open.
6. Click on the heading Name and rename the track 'Verse 1'.
Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Verse 1' then click OK.
7. Move the Intro track underneath the Click track
Move the pointer to the Intro track and Click-Hold on the text 'Mono, 44100Hz'. The track will turn dark grey and the pointer will become a pointing hand. Click-Hold and drag the track directly beneath the Click track.

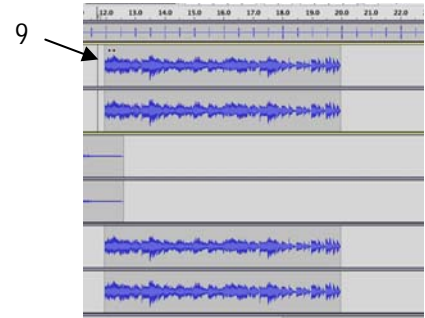


4A

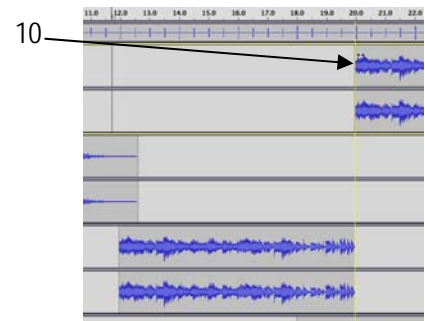
- 8. Activate the Time Shift Tool.
Move the pointer to the Tools Toolbox and select the two arrows \leftrightarrow located in the lower middle.



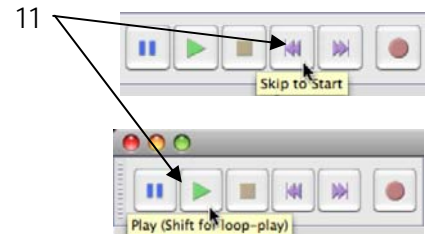
- 9. *Use the time shift tool to drag the start of the Verse 2 track to where the Verse 1 track ends (approximately 20 second mark)*



- 10. The Project Window should resemble this.



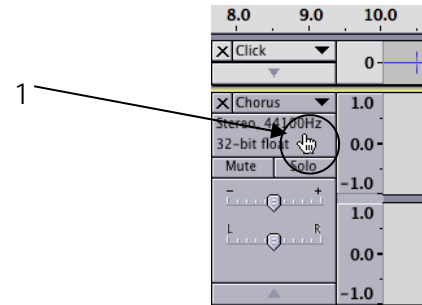
- 11. Reset the Playhead to the start of the project, click play and listen to your efforts.



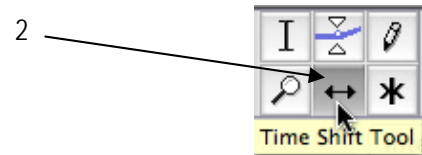
4B Moving the Chorus Track

When you listened to Activity 4A you will have heard the clash of rhythms from the 18 second mark onwards as the Verse tracks clash with chorus track. You will now move the Chorus track.

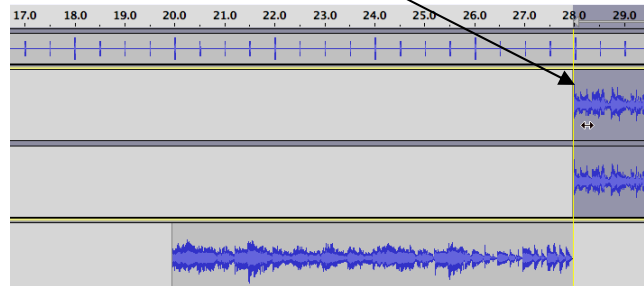
1. Move the Chorus track underneath the Click track
Move the pointer to the Chorus track and Click-Hold on the text 'Mono, 44100Hz'. The track will turn dark grey and the pointer will become a pointing hand. Click-Hold and drag the track directly beneath the Click track..



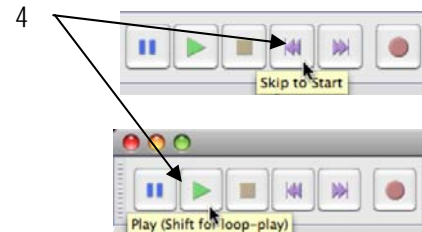
2. Activate the Time Shift Tool.
Move the pointer to the Tools Toolbox and select the two arrows ↔ located in the lower middle.



3. Use the time shift tool to drag the start of the Chorus track to where the Verse 2 track ends (approximately 28 second mark)



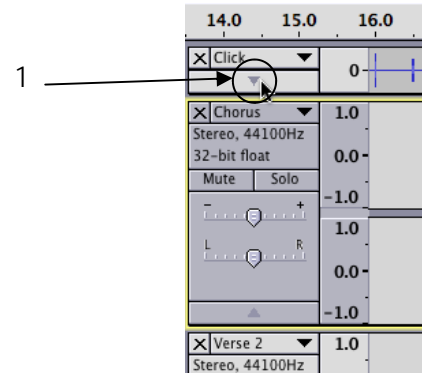
4. Reset the Playhead to the start of the project, click play and listen to your efforts.



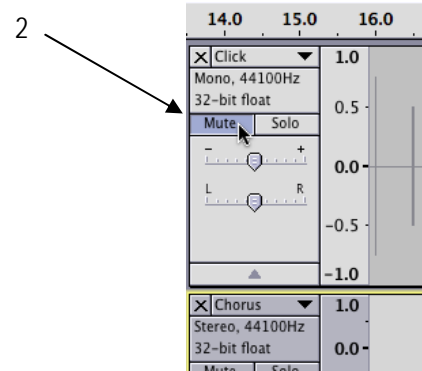
4C Mute the Click Track

The Click track is very useful as a reference for helping us shift music that contains regular rhythms. In this remix, you have now finished moving the rhythmic sections so it is a good idea to mute the Click track so that we are only listening to the music.

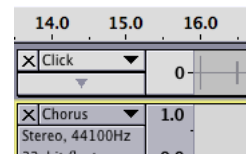
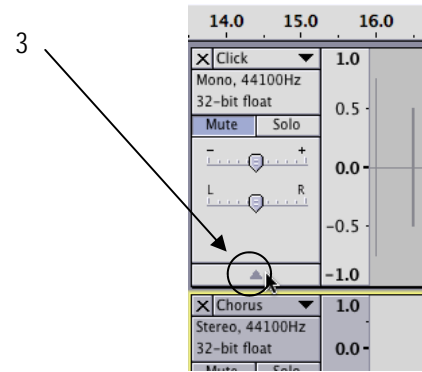
1. Maximize the Click track menu and track width.
Move the pointer to the Click track menu and locate the triangle on the lower edge of the menu. Click on it.



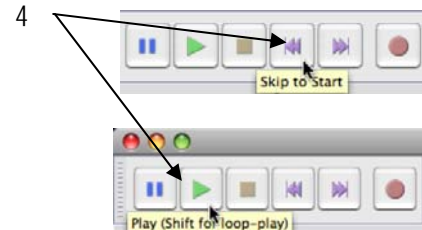
2. Mute the track titled 'Click'.
Move the pointer to the track titled Click and click on the mute button. The waveform picture on that track changes colour.



3. Minimize the Click track menu and track width.
Move the pointer to the Click track menu and locate the triangle on the lower edge of the menu. Click on it.



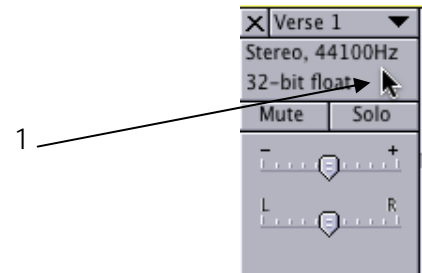
4. Reset the Playhead to the start of the project, click play and listen the difference now that the click track is muted.



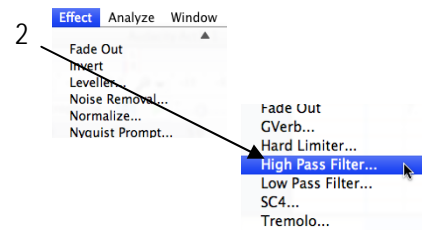
4D AM Radio FX

You will now add a High Pass Filter effect to the Verse 1 track so as to emulate a Cheap AM radio sound.

1. Select the track titled 'Verse 1'.
Move the pointer to just above the Solo button (not on the Solo button though) and click.. The track will turn a dark grey.

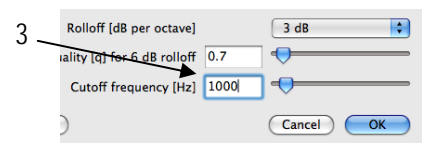


2. Effect>High Pass Filter.
Move the pointer to the Effect menu and select High Pass Filter from the dropdown list.. A new High Pass Filter window will open.

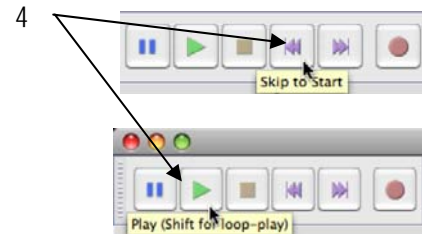


3. Type in the values as shown and then click OK

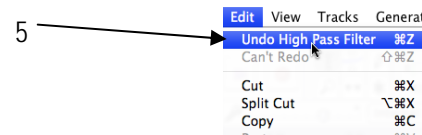
- Rolloff = 3 dB
- Filter Quality = 0.7
- Cutoff Frequency = 1000



4. Click play and listen to your efforts.



5. Undo this effect, Edit>Undo High Pass Filter.
Move the pointer to the Edit menu and select Undo High Pass Filter.



Experiment with Increasing the Hertz value, so that the Verse 1 track loses more low frequencies.

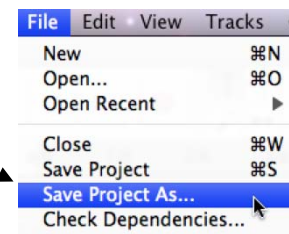
6. Repeat steps 1-5 and change the Hz settings to the following values 1,500- 2500 Hz. And listen to the changes.

7. You decide which setting you prefer and confirm these changes by clicking OK

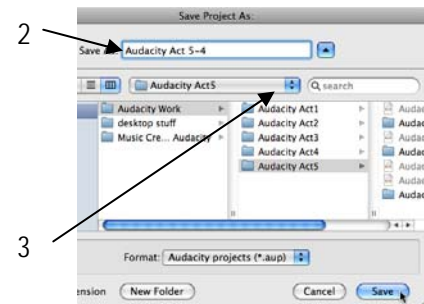
4E Saving Your Work

This allows your audio project with all of its various sounds and edits to be saved for later editing. This is a large file size so make sure you have enough storage space in your personal storage area or USB memory stick.

1. File Menu>Save Project As.
Move the pointer to the file menu, then select Save Project As.

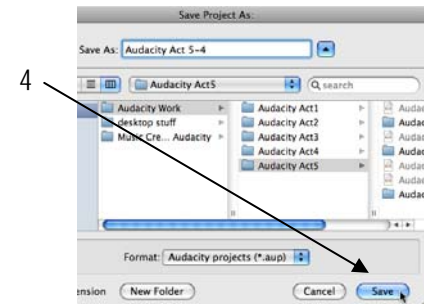


2. Name the Project 'Audacity Act 5-4'.
Move the pointer to the Save As text area and type the name 'Audacity Act 5-4'.



3. Locate the 'Audacity Work' folder created in Activity 5 Part 1E. to save your work.
Move the pointer to the column view and then navigate to the 'Audacity Work' folder created in Activity 5 Part 1E

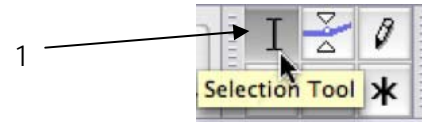
4. Click Save.



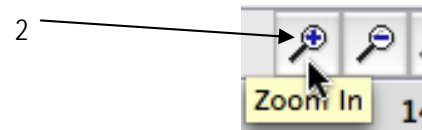
5A Splitting Audio

At the end of the song there is an out of place vocal line 'Ladies and Gentlemen'. We will split this, duplicate it and time shift it to the chorus section of the song.

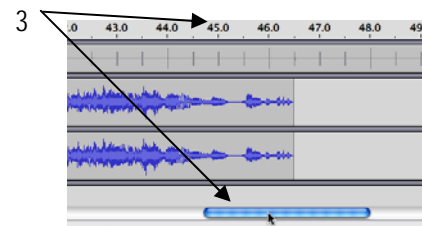
1. Activate the Selection Tool.
Move the pointer to the Tools Toolbox and select the capital I located in the upper left corner.



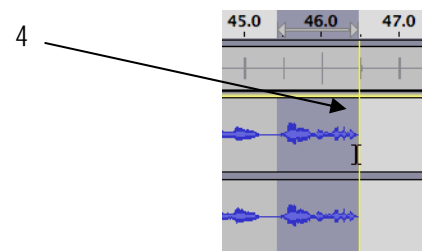
2. Use the Zoom In control so that individual second markers eg. 44.0, 45.0, 46.0 are easily seen in the timeline ruler.



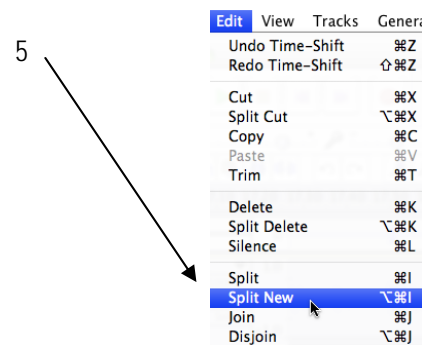
3. Horizontal scroll bar to position the Chorus track at the 45 second mark in the centre of the project window



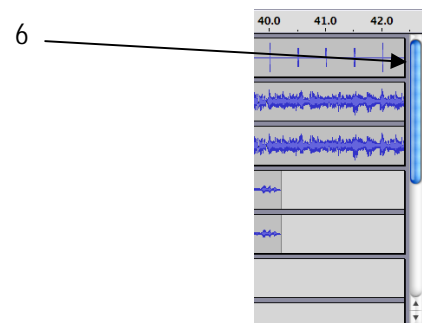
4. On the Chorus Track, Select the Ladies and Gentlemen audio located at the 45.5 second marker to the 46.5 second marker.
Move the Selection Tool pointer to the Chorus track at the 45.5 second marker. Click -Hold and drag to the 46.5 second marker.



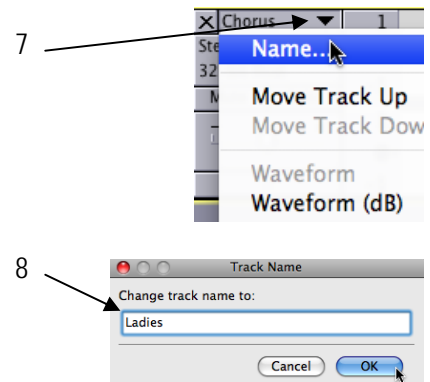
5. Edit>Split New
Move the pointer to the Edit menu and click Split New. The selected region is now placed onto it's own track.



6. Use the vertical scrollbar and locate the newly created track (the final track at the bottom of the Project Window).

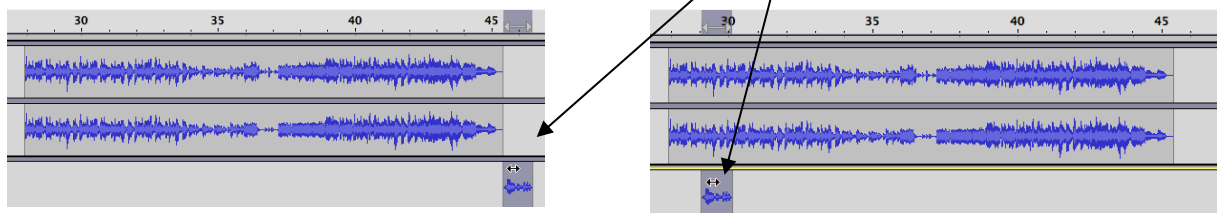
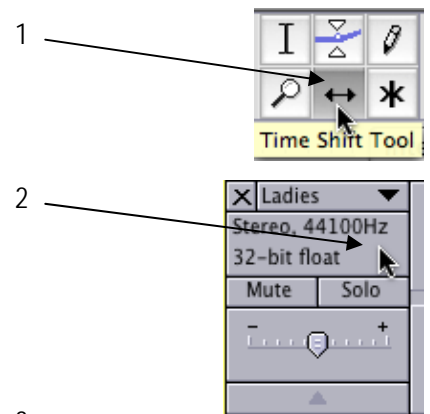


- 5A**
- Open the Track menu for the final track (Chorus).
Move the pointer to the far left side of the project window and on the final track, click on the inverted triangle. A track menu will open.
 - Click on the heading Name and rename the track 'Ladies'.
Move the pointer to the heading Name and click. A Track Name window will open. Type the name 'Ladies' then click OK.

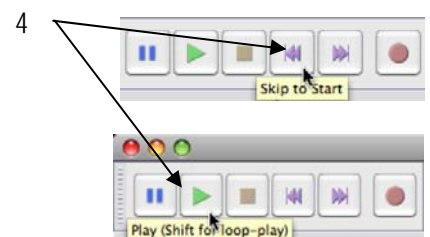


5B Repositioning the Text

- Activate the Time Shift Tool.
Move the pointer to the Tools Toolbox and select the two arrows \leftrightarrow located in the lower middle.
- Select the track titled 'Ladies'.
Move the pointer to just above the Solo button (not on the Solo button though) and click.. The track will turn a dark grey.
- Click-Hold and drag the audio region 'Ladies and Gentlemen' from the 45 second mark to somewhere during the Chorus section that sounds musically effective

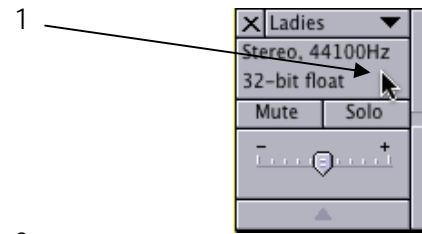


- Reset the Playhead to the start of the project, click play and listen to the repositioned text. Reposition the text until you are satisfied with its position.

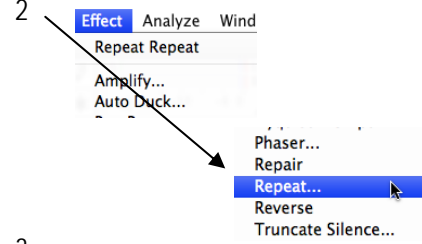


5C Duplicating the Audio Region

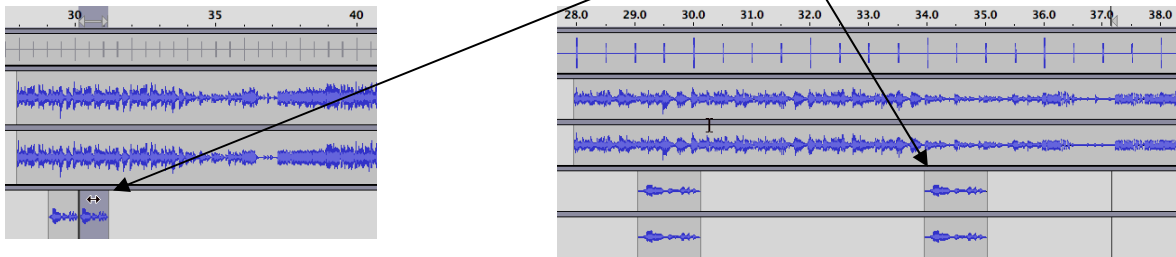
1. Select the track titled 'Ladies'.
Move the pointer to just above the Solo button (not on the Solo button though) and click.. The track will turn a dark grey.



2. Effect Menu>Repeat
Move the pointer to the Effect menu and select Repeat.

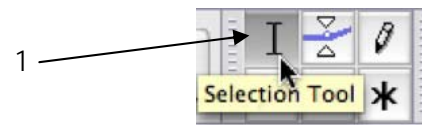


3. Using the Time Shift Tool, Click-Hold and drag the repeated audio region 'Ladies and Gentlemen' to the 34 second mark.

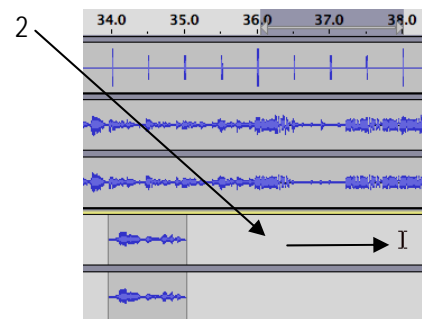


5D Inserting Silence and Echo Effect

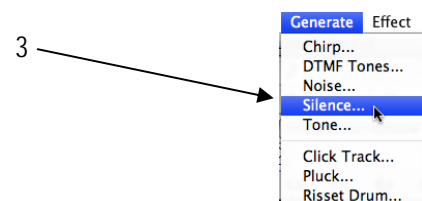
1. Activate the Selection Tool.
Move the pointer to the Tools Toolbox and select the capital I located in the upper left corner.



2. On the Ladies track, click with the selection tool at the 36 second marker and Click-Hold and drag to the 38 second marker.

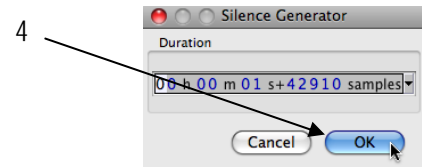


3. Generate>Silence.
Move the pointer to the Generate menu and select Silence. A Silence Generator window will open.

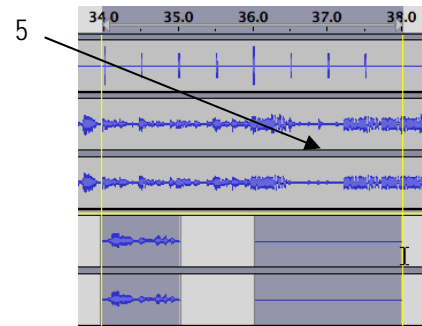


5D Adding Silence and Echo FX

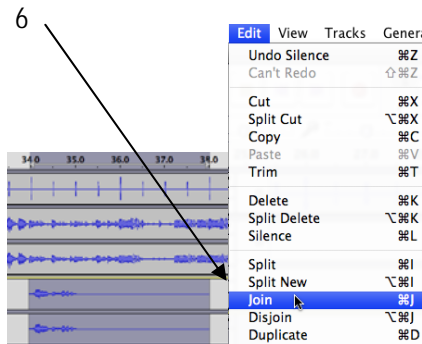
4. In the Silence Generator window that open, click OK.



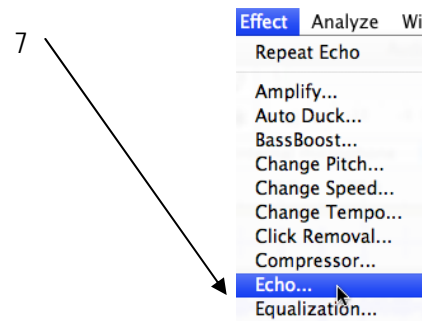
5. Select the two audio regions track that contains the second Ladies and Gentlemen and the newly created silent audio region.
Move the pointer to the region beginning at the 34 second marker. Click Hold and drag until and click.. The track and the two audio regions will turn a dark grey.



6. Edit Menu>Join.
Move the pointer to the Edit menu and select Join. Your original recording is lengthened with 4 seconds of silence.

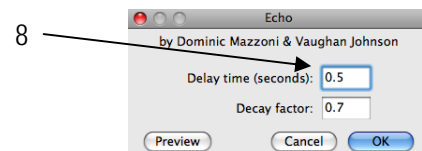


7. Effect Menu>Echo
Move the pointer to the Effect menu and select Echo.

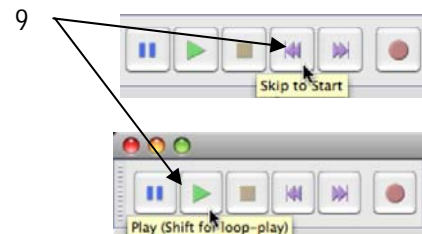


8. Type in the following values as shown and then click OK

- Delay time = 0.5
- Decay factor = 0.7



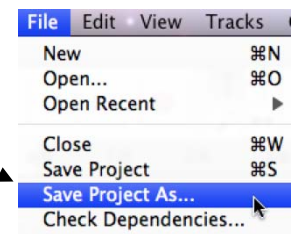
9. Reset the Playhead to the start of the project, click play and listen for the repositioned text and echo effect.



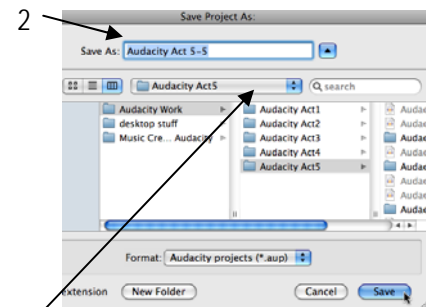
5E Saving Your Work

This allows your audio project with all of its various sounds and edits to be saved for later editing. This is a large file size so make sure you have enough storage space in your personal storage area or USB memory stick.

1. File Menu>Save Project As.
Move the pointer to the file menu, then select Save Project As.

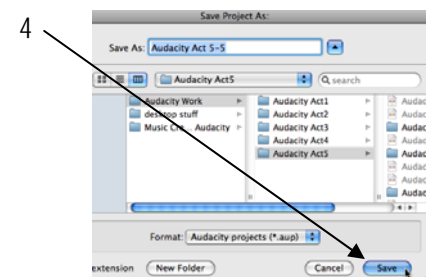


2. Name the Project 'Audacity Act 5-5'.
Move the pointer to the Save As text area and type the name 'Audacity Act 5-5'.



3. Locate the 'Audacity Work' folder created in Activity 5 Part 1E. to save your work.
Move the pointer to the column view and then navigate to the 'Audacity Work' folder created in Activity 5 Part 1E

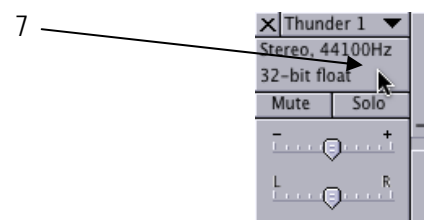
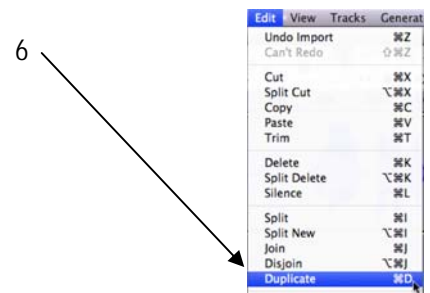
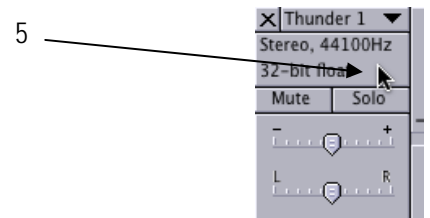
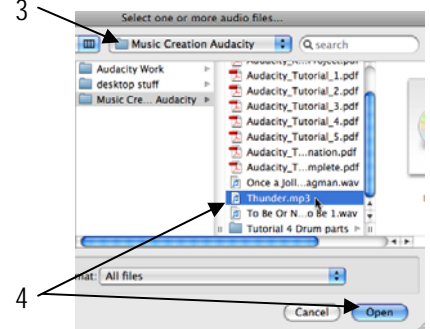
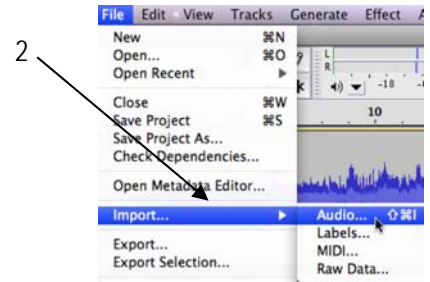
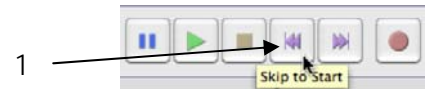
4. Click Save.



6A Importing Additional Sounds

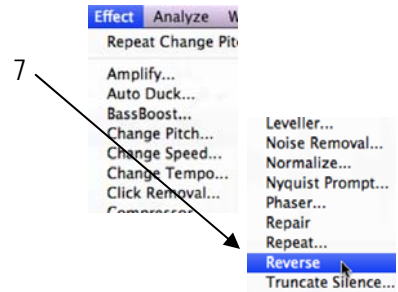
To add further interest to the remix, we will add a thunder sound to the start of this song as well as use additional effects. Repeat the following steps using the Crash Cymbal and any other sounds you like!

1. Reset the Playhead to the start of the song
2. File Menu>Import>Audio.
Move the pointer to the file menu, then move downwards to Import and across to Audio.
3. Locate the Music Creation Audacity resource folder.
Use the finder window navigation browser and follow your teachers directions
4. Select 'Thunder.mp3' and click Open.
5. Select the track titled Thunder 1.
Move the pointer to just above the Solo button (not on the Solo button though) and click.. The track will turn a dark grey.
6. Edit Menu>Duplicate.
Move the pointer to the Edit Menu and select Duplicate. A second track is inserted into the Project Window.
7. Select the second track titled Thunder 1.
Move the pointer to just above the Solo button (not on the Solo button though) and click.. The track will turn a dark grey.

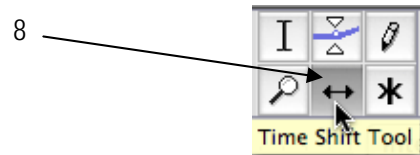


6A Importing Additional Sounds

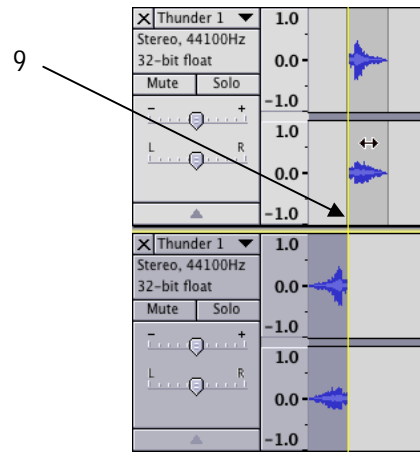
- 7. Edit Menu>Reverse.
Move the pointer to the Edit Menu and select Reverse. A second track is inserted into the Project Window.



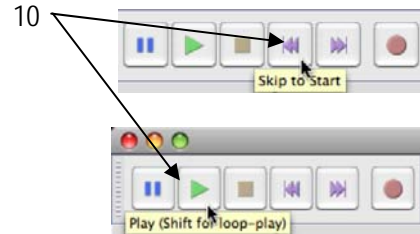
- 8. Activate the Time Shift Tool.
Move the pointer to the Tools Toolbox and select the two arrows ←→ located in the lower middle.



- 9. Move the Time Shift tool to the non-reversed Thunder 1 track. Click-Hold and drag the audio region to the finish point of the reversed Thunder 1 track.



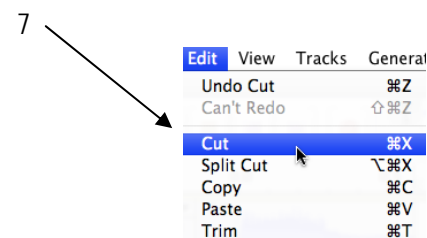
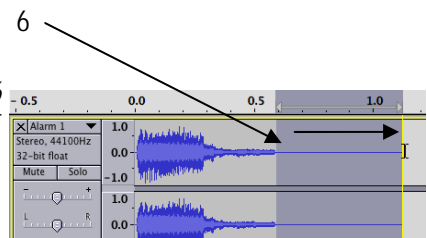
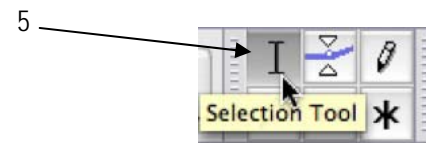
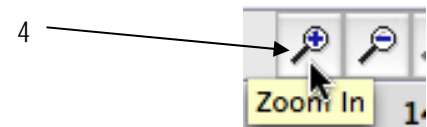
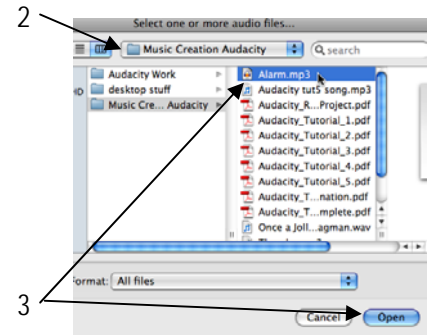
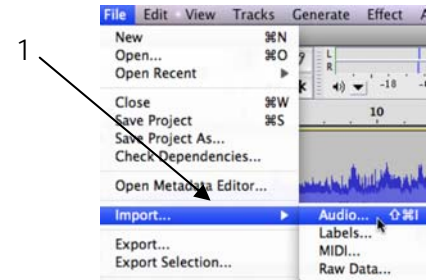
- 10. Reset the Playhead to the start of the project, click play and listen for the effect that the reversed thunder has on the Song introduction



6B Trimming an Alarm Siren

Some sounds you import may need some editing to be musically effective. Follow these steps to make a simple siren sound add further interest to your remix.

1. File Menu>Import>Audio.
Move the pointer to the file menu, then move downwards to Import and across to Audio.
2. Locate the Music Creation Audacity resource folder.
Use the finder window navigation browser and follow your teachers directions
3. Select 'Alarm.mp3' and click Open.
4. Use the Zoom In control so that second markers 0.5-1.0-1.5 are easily seen in the timeline ruler.
5. Activate the Selection Tool.
Move the pointer to the Tools Toolbox and select the capital I located in the upper left corner.
6. On the Alarm track, select the silence from 0.6 second marker until the end of the audio region.
Move the pointer to the Alarm track region beginning at the 0.6 second marker. Click-Hold and drag until you reach the end of the audio region.
7. Edit Menu>Cut.
Move the pointer to the Edit menu and select Cut. The Alarm recording is now shortened.

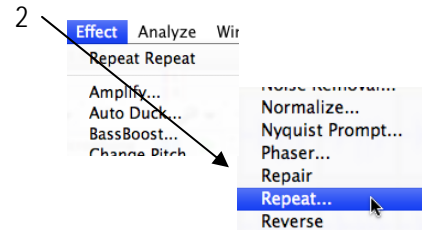


6C Repeating and Joining an Alarm Siren

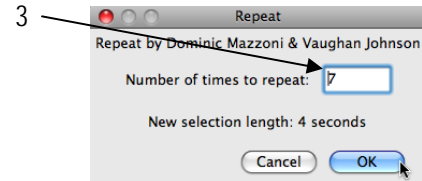
1. Select the track titled Alarm
Move the pointer to just above the Solo button (not on the Solo button though) and click.. The track will turn a dark grey.



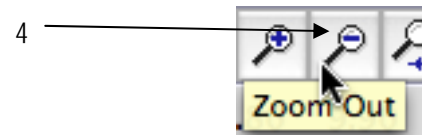
2. Effect Menu>Repeat.
Move the pointer to the Effect menu and select Repeat. A new window will open.



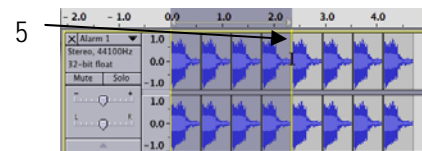
3. Type in the values as shown and then click OK.
 • Number of times to repeat = 7



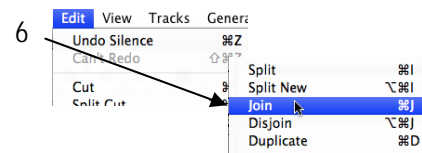
4. Use the 'Zoom Out' to enlarge the audio region around the 1 second mark so that the timeline ruler shows whole seconds (1-2-3 etc.)



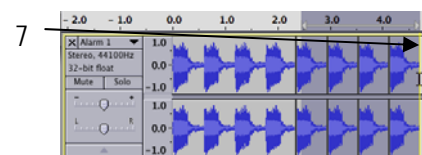
5. On the Alarm track, select the first 4 audio regions.
Move the Selection Tool pointer to the Alarm track and Click-Hold and drag until the end of the 4th audio region



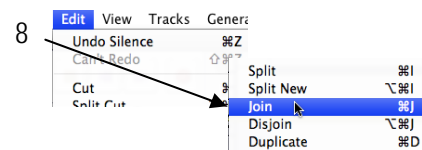
6. Edit Menu>Join.
Move the pointer to the Edit menu and select Join. Your original recording is lengthened with 4 seconds of silence.



7. On the Alarm track, select the final 4 audio regions.
Move the Selection Tool pointer to the Alarm track and Click-Hold and drag until the end of the final audio region



8. Edit Menu>Join.
Move the pointer to the Edit menu and select Join. Your original recording is lengthened with 4 seconds of silence.

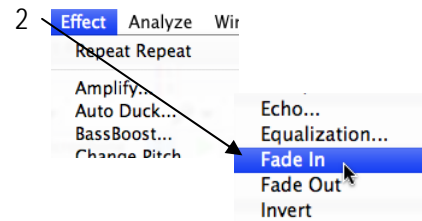


6D Fade In - Fade Out

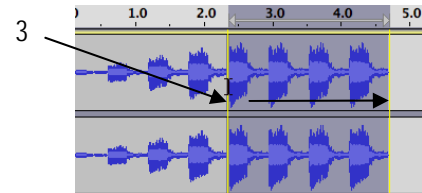
1. On the Alarm track, select the first audio region.
Move the Selection Tool pointer to the Alarm track and from 0.0 second marker, Click-Hold and drag until the end of the 1st audio region



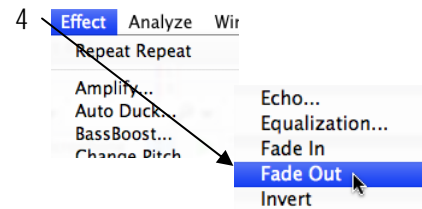
2. Effect Menu>Fade In.
Move the pointer to the Effect menu and select Fade In. A new window will open.



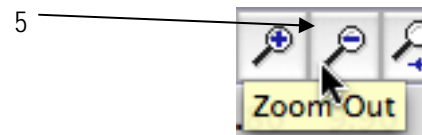
3. On the Alarm track, select the second audio region.
Move the Selection Tool pointer to the Alarm track and from just before the 2.5 second marker, Click-Hold and drag until the end of the 2nd audio region




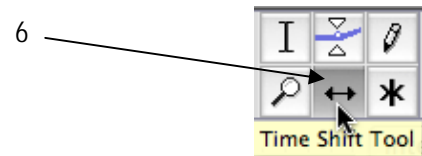
4. Effect Menu>Fade Out.
Move the pointer to the Effect menu and select Fade Out. A new window will open.



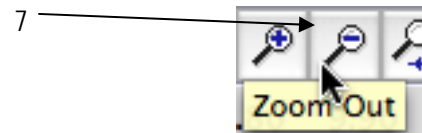
5. Select the track titled Alarm
Move the pointer to just above the Solo button (not on the Solo button though) and click. The track will turn a dark grey.



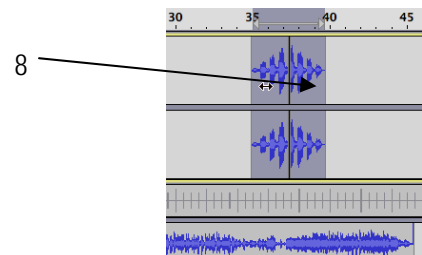
6. Activate the Time Shift Tool.
Move the pointer to the Tools Toolbox and select the two arrows  located in the lower middle.



7. Use the 'Zoom Out' to enlarge the Project window region so that the 35 second marker is visible in the timeline ruler.



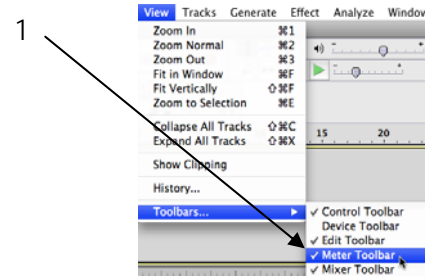
8. Use the time shift tool to drag the Alarm track audio regions to begin at the 35 second marker.



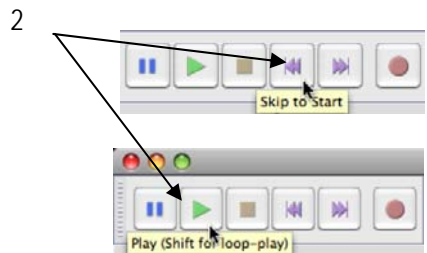
6E Mixing - Avoiding the Red Meter

Mixing a recording project requires you to make decisions about how the many different sounds will blend. In this project you are required to consider volume balance and panning. As more audio tracks are added to a project, so the overall volume of the mix can increase. This can cause the sound to become distorted and unpleasant. A volume meter is used to check that the overall mix volume is not exceeded.

1. Open Meter Toolbar - View Menu>Toolbars>Meter Toolbar
Move the pointer to the view menu, then move downwards to Toolbars and across to Meter Toolbar.

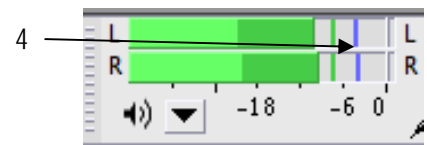


2. Reset the Playhead to the start of the project, click play and listen carefully for the tracks that may need to be quieter or louder.

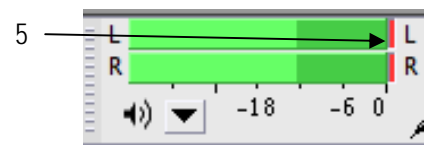


3. Refer to the mixing advice given in Activity 3, section 4D and 4E.

4. A good volume level for the volume meter looks like this.



5. A distorted and 'not-so-good' volume meter looks like this.

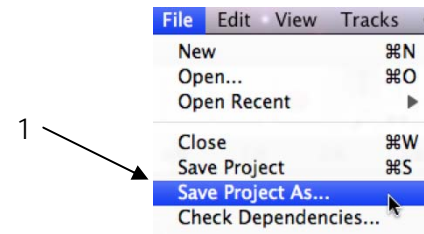


You may need to make many adjustments until you are satisfied with the volume balance and panning of your remix.

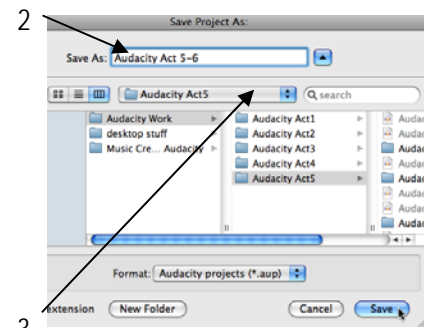
6E Saving Your Work

This allows your audio project with all of its various sounds and edits to be saved for later editing. This is a large file size so make sure you have enough storage space in your personal storage area or USB memory stick.

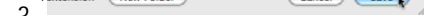
1. File Menu>Save Project As.
Move the pointer to the file menu, then select Save Project As.



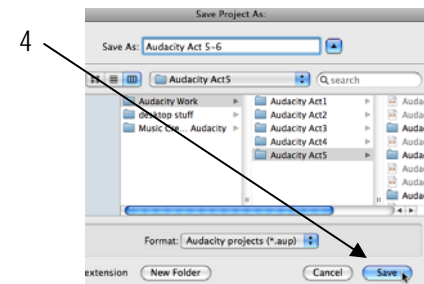
2. Name the Project 'Audacity Act 5-6'.
Move the pointer to the Save As text area and type the name 'Audacity Act 5-6'.



3. Locate the 'Audacity Work' folder created in Activity 5 Part 1E. to save your work.
Move the pointer to the column view and then navigate to the 'Audacity Work' folder created in Activity 5 Part 1E



4. Click Save.



7A The Mix-Down - exporting to a MP3 stereo sound file

Your current song will only playback using the Audacity program. To make your song accessible to other people you will export the song in a stereo format. This becomes a two track mix containing a left and right channel. Audacity supports a number of sound export formats. You will use the MP3 format that compresses an audio waveform so that it becomes a much smaller file size. This is good for internet distribution and iPod style MP3 players. There is a loss of audio quality in this format and this is determined by the bit rate value you select. Above 128 and it should sound fine.

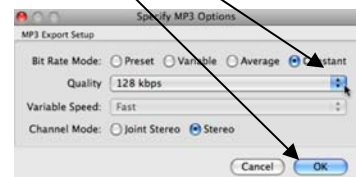
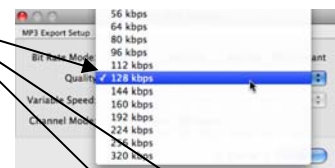
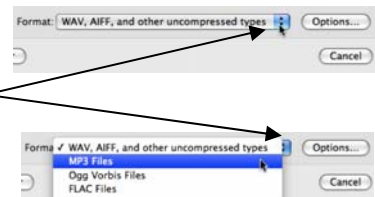
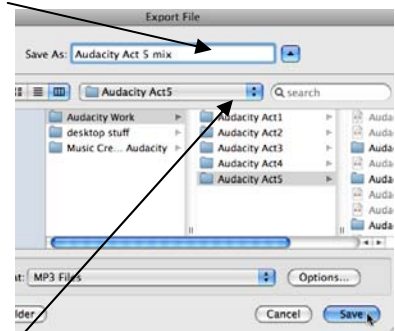
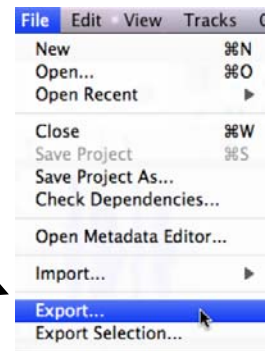
1. File Menu>Export
Move the pointer to the file menu, then select Export..

2. Name the Project 'Your Name Act 5 mix'.
Move the pointer to the Save As text area and type the name 'Your Name Act 5 mix'. (Your Name refers to your first name and surname or an abbreviation that clearly indicates that it is your work.)

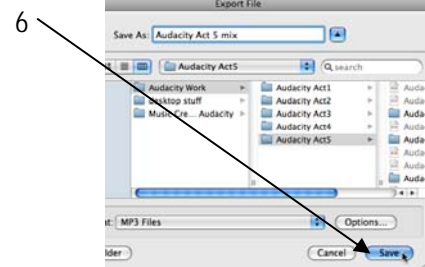
3. Check that storage location is within the following folders, 'Audacity Work>Audacity Act 5'.
If the location is not correct, navigate using the finder until you locate or create the correct folder path.

4. In the Format window, select MP3 Files.
Move the pointer to the Format window scroll arrows, click and select MP3 files from the pop down list..

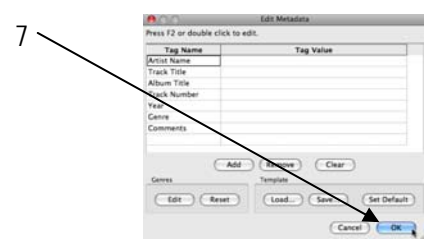
5. In the Format Options menu, select the Bit Rate Mode to be constant, the Quality to be 128 kbps and the Channel Mode to be Stereo.
Move the pointer to the Format window Options menu and click. A new window titled Specify MP3 Options opens. Select the Bit Rate Mode to be constant, the Quality to be 128 kbps and the Channel Mode to be Stereo. Then click OK.



7A 6. The Export File Window is visible and active, click Save.



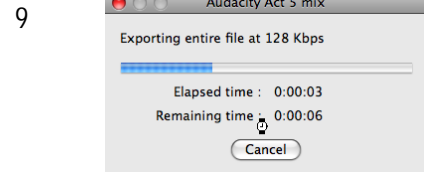
7. A new window titled Edit Metadata opens. Leave these fields blank. Click OK
(Metadata information for MP3's is useful for providing further details about the history of the file.)



8. A warning window may appear. Click OK.



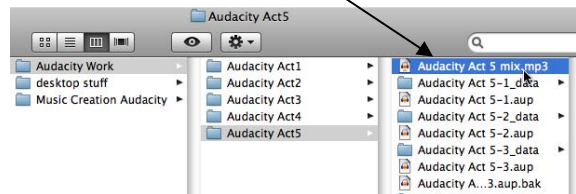
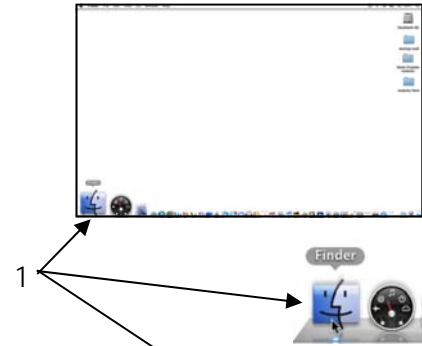
9. The file is now exported as an MP3 stereo mix.



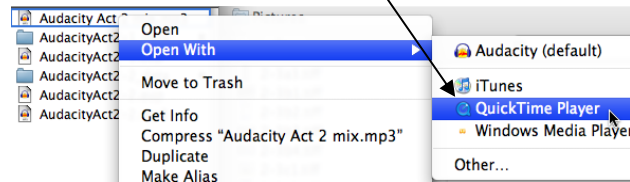
7B Playback file in QuickTime Player or iTunes

To check that your completed Activity 5 MP3 mix has been saved correctly, we will play the file within another audio program.

1. Open a finder window and navigate to the location of the file that you saved in Part 7A 'Your Name Act 5 mix.mp3'.
Move the pointer to the finder menu in your dock, navigate to the location of the file that you saved in Part 6A 'Your Name Act 5 mix.mp3'.



2. Control click once on the file name and select Open With and choose either QuickTime Player or iTunes.
Press-Hold the keyboard Control key (ctrl) and click on the 'Your Name Act 5 mix'. A pop-menu opens and move the pointer to the Open With menu and then click on QuickTime Player. A new QuickTime player window will open

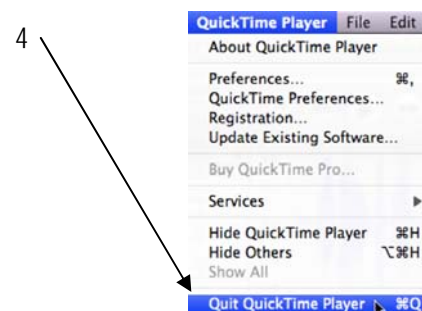


3. Click on the QuickTime play control and listen to your Audacity Activity 5 mix.



You are listening to check that all tracks are audible in the mix and that they are correctly panned and balanced with each other. If you have found some problems, return to Activity XXX and repeat the Arrange and Mix steps. Then re-export and check that it is now correct.

4. Quit QuickTime. QuickTime Player Menu>Quit QuickTime Player
Move the pointer to the QuickTime Player Menu and click. From the drop-down menu click on Quit QuickTime Player.



7C Submit Completed Work for Evaluation

Your completed Audacity Activity 5 MP3 is now ready for evaluation. Follow your teachers directions for submitting this MP3 file. Try to arrange for your family and friends to hear your work. This could involve sending the file as an email attachment or downloading it into a personal MP3 player.

Evaluation Criteria

Completion and Accuracy of:

• Verse Repetition	5
• Intro Delay FX	5
• AM Radio EQ	5
• Rhythmic Accuracy of Sections	5
• Ladies and Gentlemen Delay FX	5
• Chorus Extending Phrase	5
• Thunder Reverse	5
• Alarm trimming and repetition	5
• Alarm Fade In / Fade Out	5
• Mixing - Track Volumes and Panning	5
• Volume meter not peaking	5
• MP3 export	5
• Correct submission of activity	5

Total 65