Topic support guide

Cambridge International A Level

Cambridge International AS & A Level Information Technology

9626

For examination from 2017

Topic 10 Sound and video editing

Sub-topic 10a Sound editing – Task 4

Cambridge Advanced

CAMBRIDGE International Examinations

Version 1

Audio editing task guide

These tasks could be attempted using almost any audio editing application. There are also a number of video editing applications with the facilities to edit audio to the extent required for the tasks. The software used in the screenshots shown below was Audacity®.

Audacity was chosen because it is a free open source digital audio editor and recording application and is available for different operating systems such as Windows, OS X and Linux varieties. Audacity can record audio from multiple sources and can be used for post-processing of all types of audio.

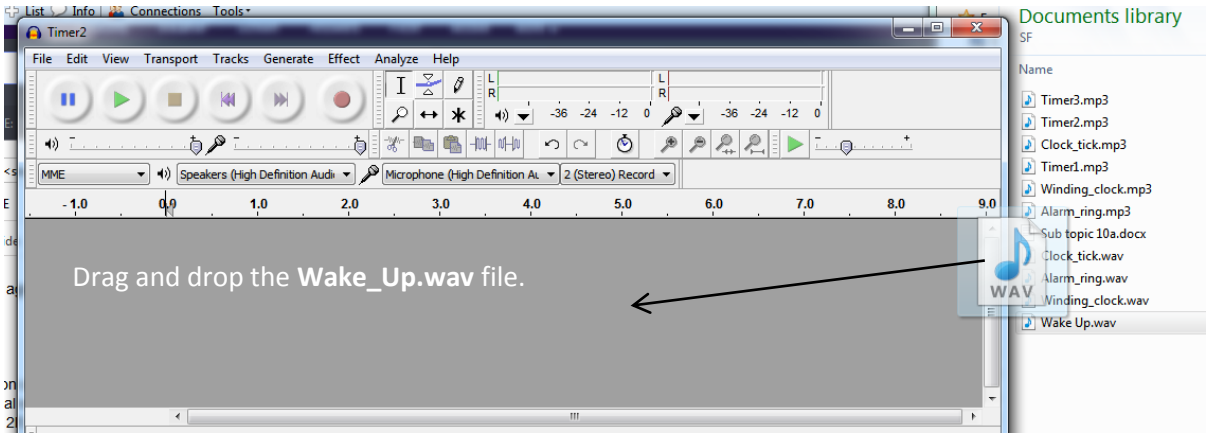
The tools needed for these tasks are simple and available in all audio editing applications. In most cases the menu items and tool buttons use the same text and the same symbols.

These tasks are designed to be undertaken as a learning process. Learners should be encouraged to use the tasks to explore the menu items and tools available in the software.

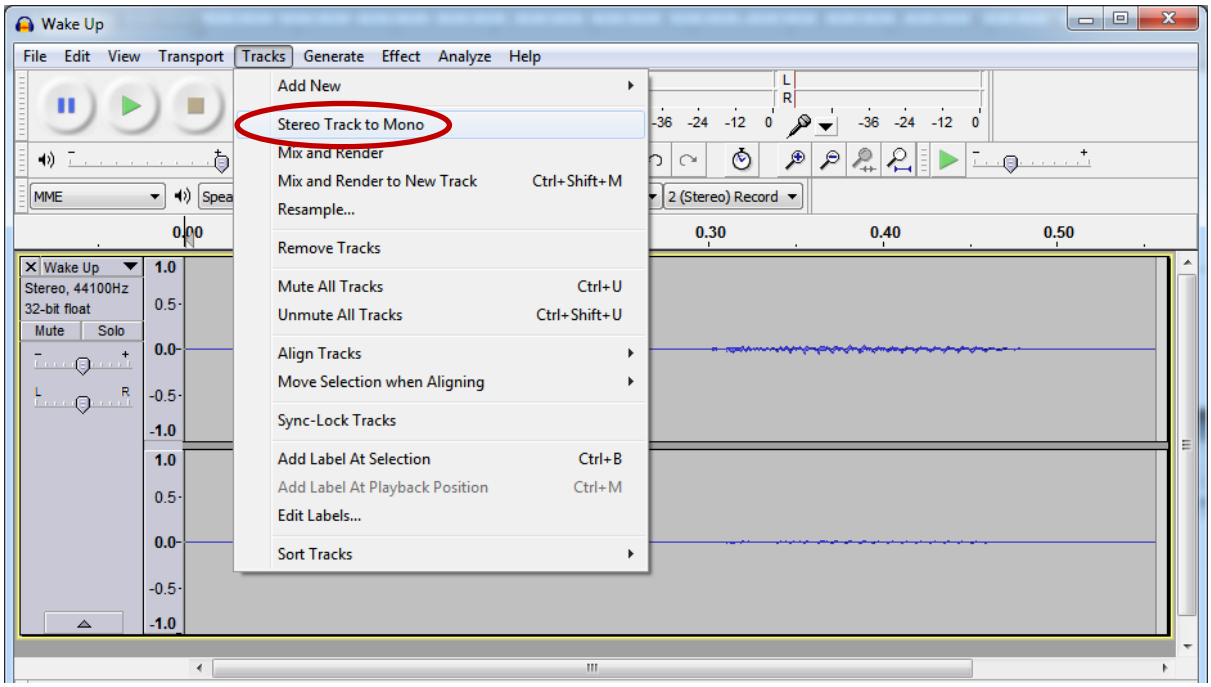
Often there is more than one way to satisfy the requirements of the task. At first, the exercises should be about exploring a variety of options and not about determining the most efficient methods. It is recommended therefore, that learners begin the tasks without access to this tutorial material.

Task 4

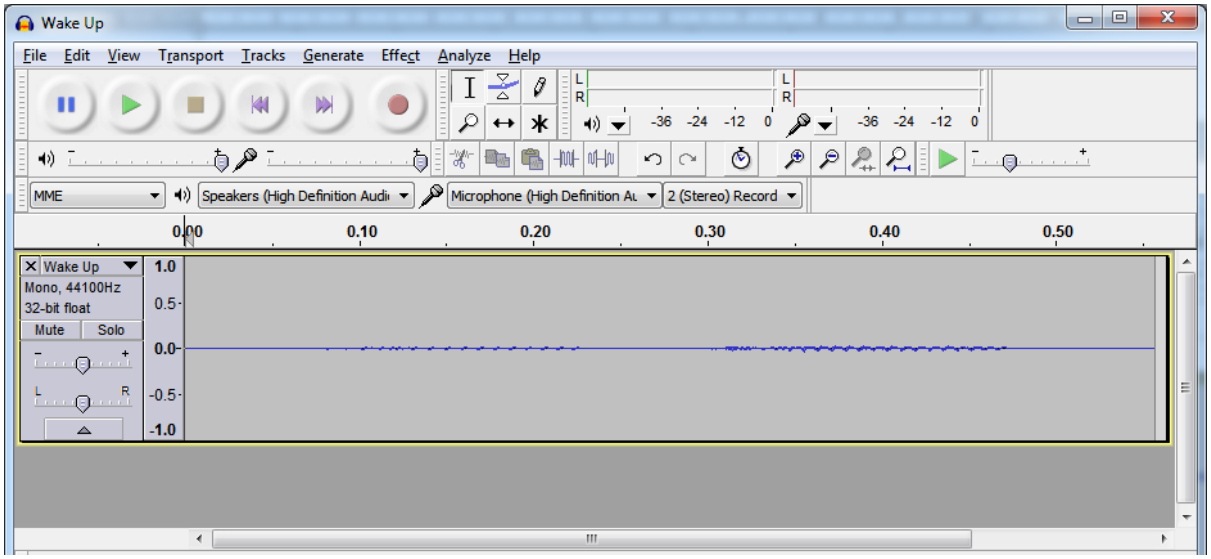
*(1) Open the **Wake_Up .wav** file.*



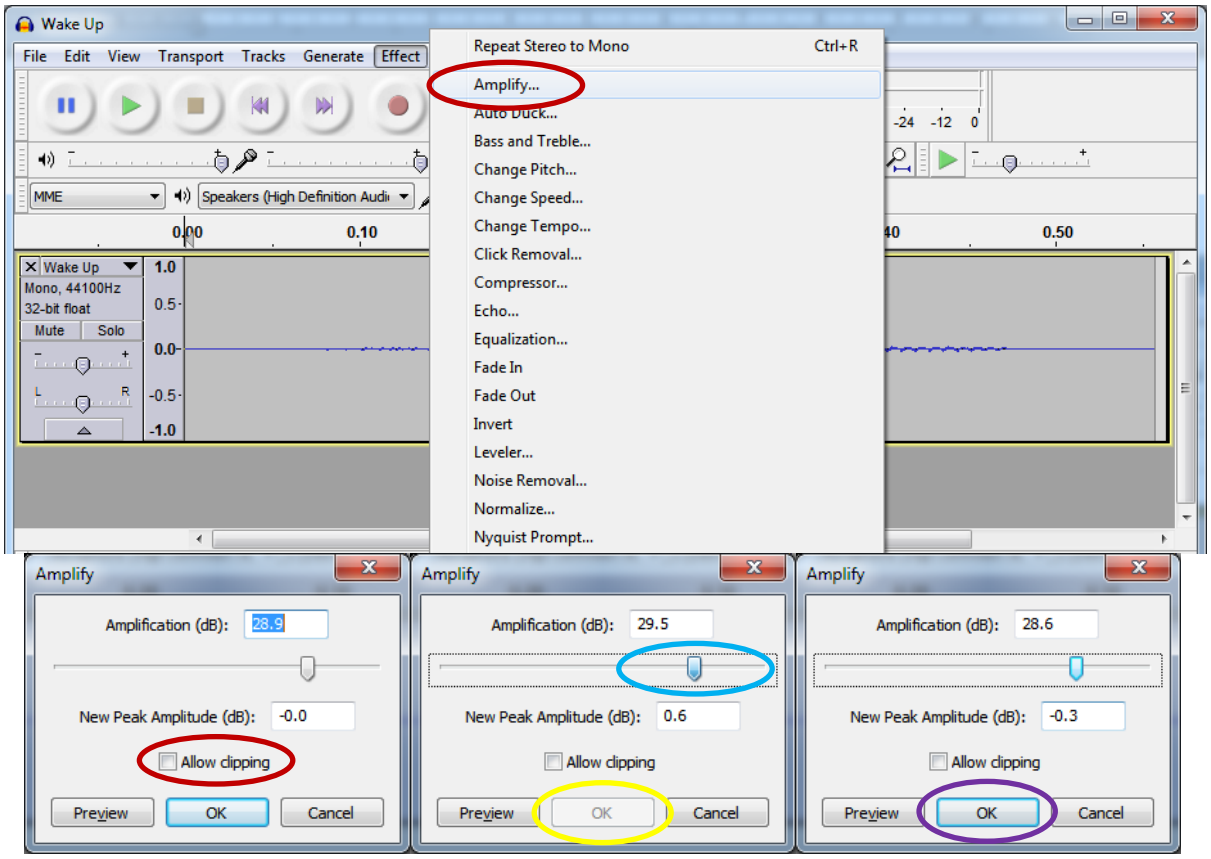
(2) Change this sound file to be monophonic.



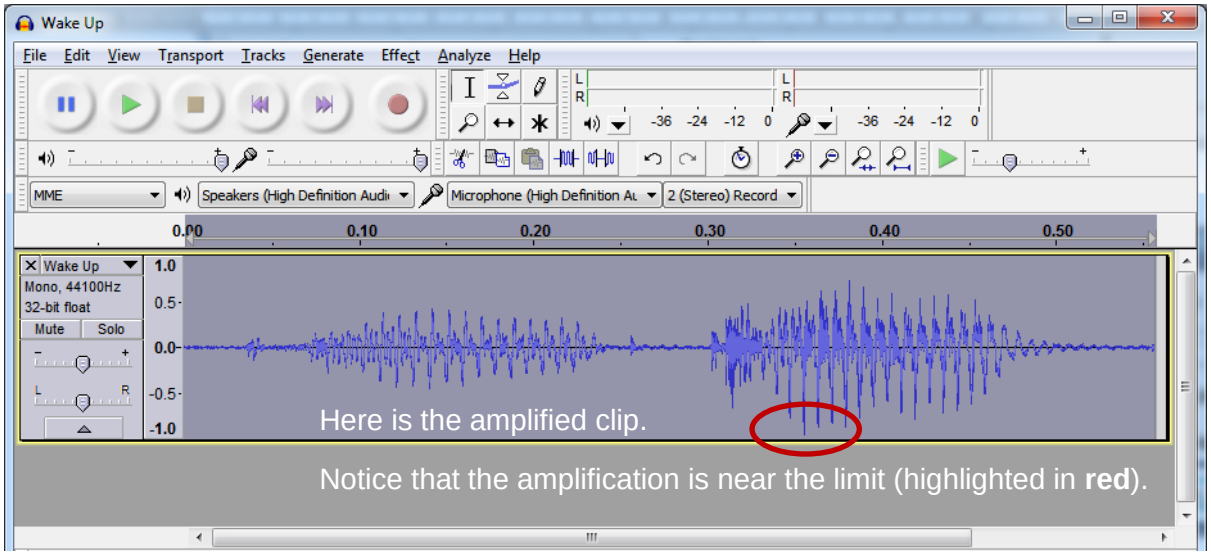
We now have a single (monophonic) track of the 'Wake Up' clip but judging by the waveform it will be a bit too quiet.



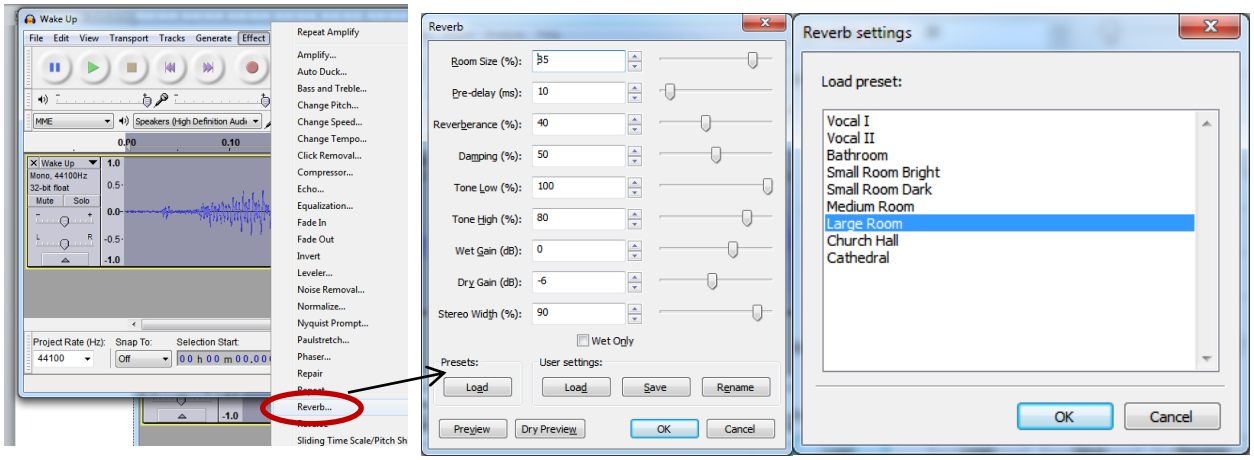
(3) Now amplify the track to the maximum value possible without clipping.



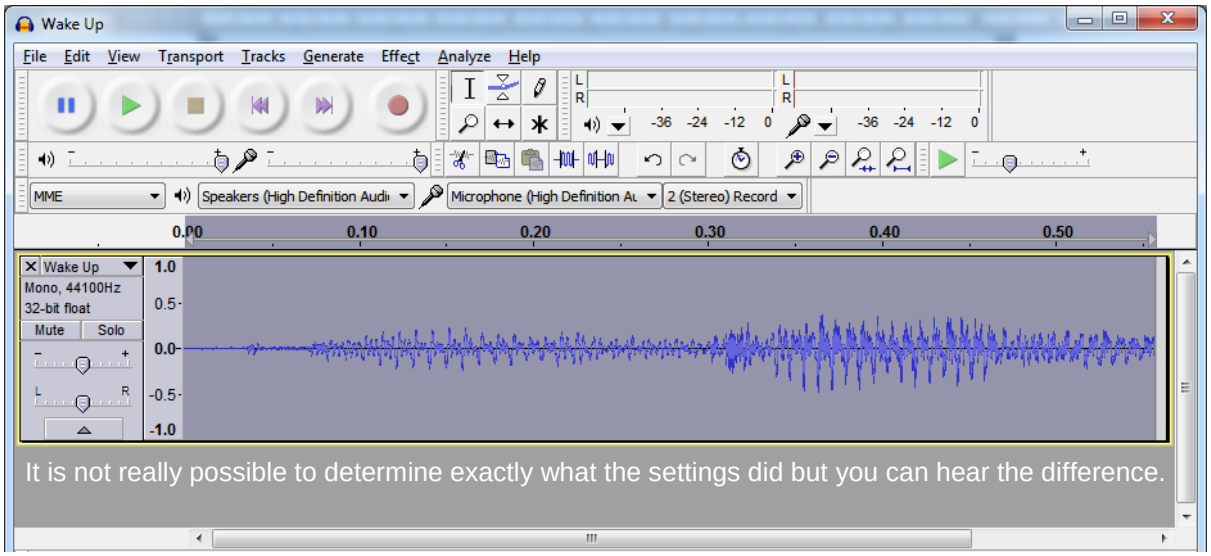
Since we don't want the sound to be distorted we must not tick the 'Allow clipping' box (highlighted in **red**).
To change the Amplification (volume of the sound) we can use the slider (highlighted in **blue**).
If we try to amplify the sound too much (causing clipping) the 'OK' button will fade out (highlighted in **yellow**).
So adjust the slider until the 'OK' button is available again (highlighted in **purple**).



*(4) Add reverberation to the track. (Choose a preset of a large room or equivalent if available.) Export the file in **.mp3** format at 128 kbps.*

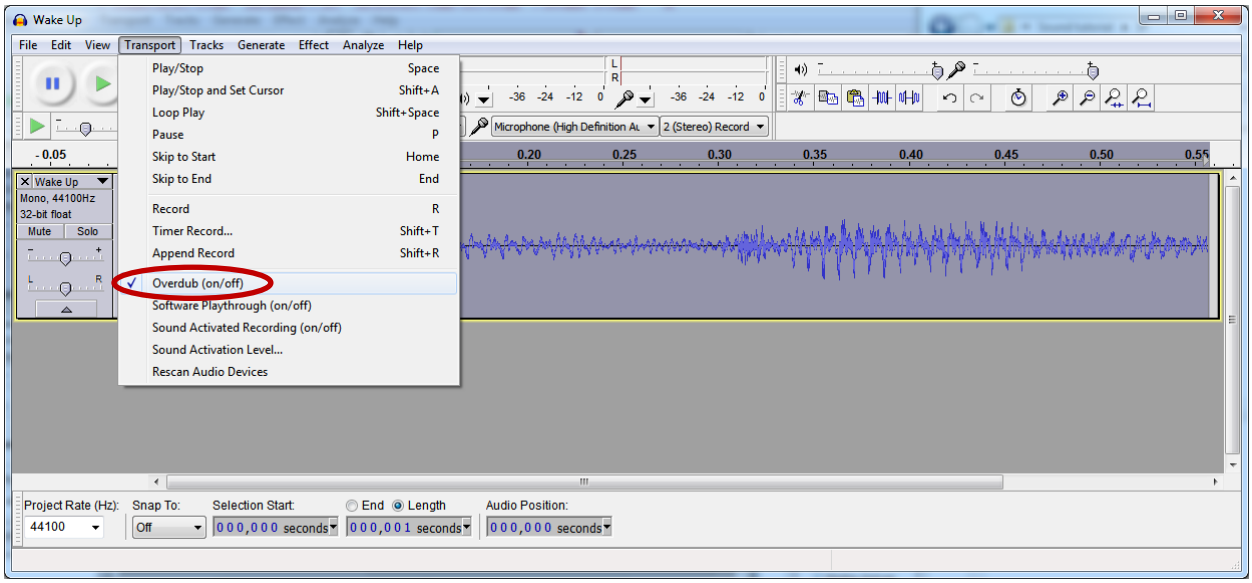


The reverberation controls are complex but we only need to load a preset setting.

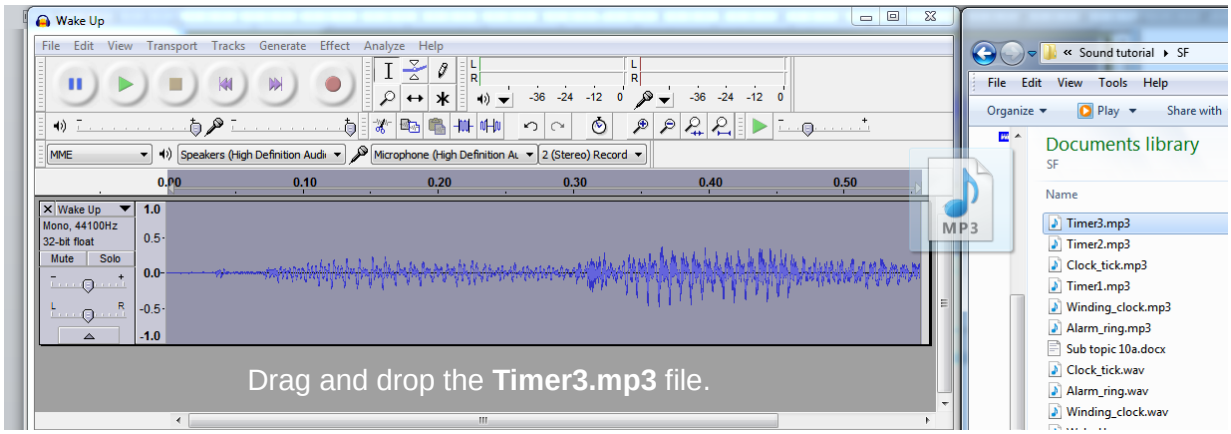


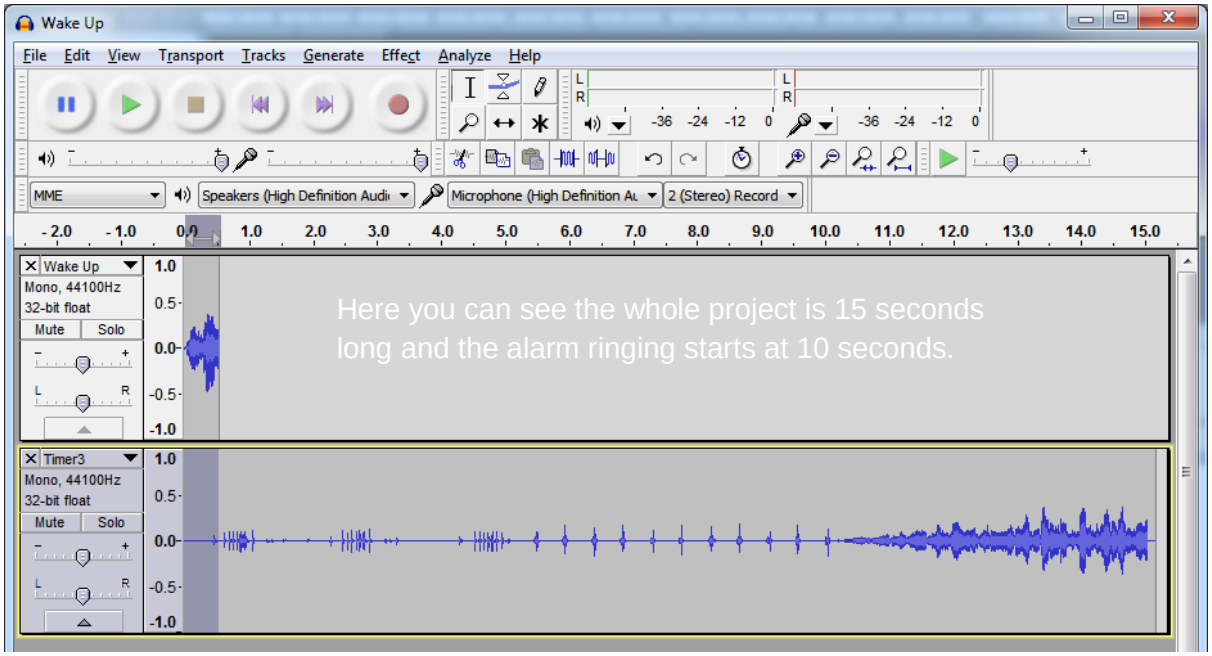
*(5) Overdub the **Wake Up** sound file with the **Timer3** file to start when the alarm starts ringing. Repeat the **Wake Up** clip for the length of the alarm ringing. Export the file in **.mp3** format and save as **Timer4.mp3**.*

'Overdub on' is the default setting but it is best practice to check.

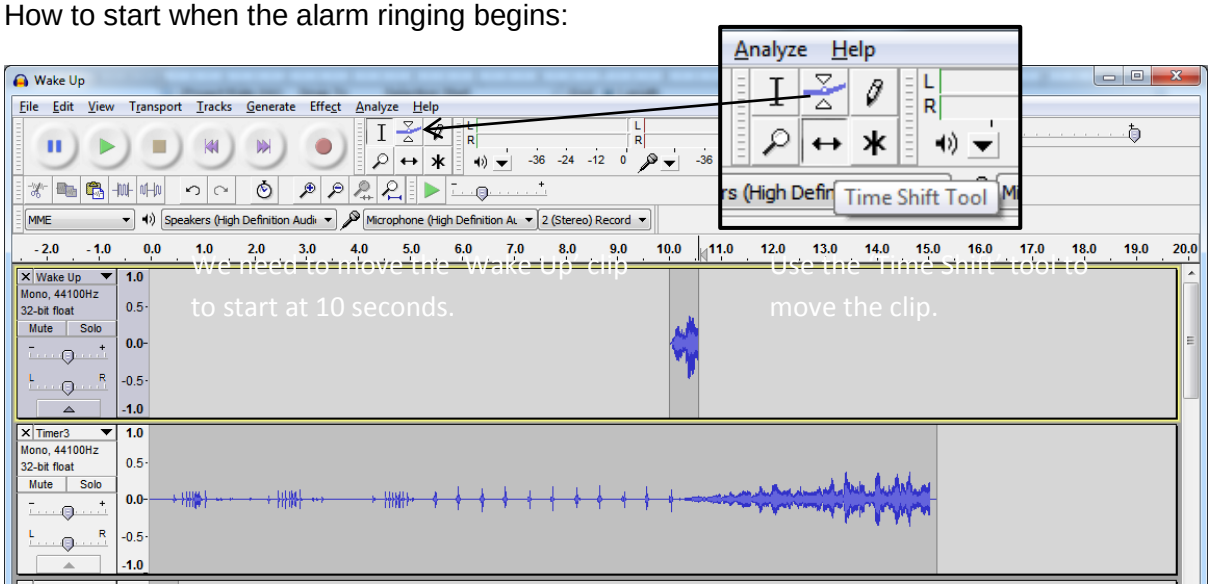


We need to load the **Timer3.mp3** file.

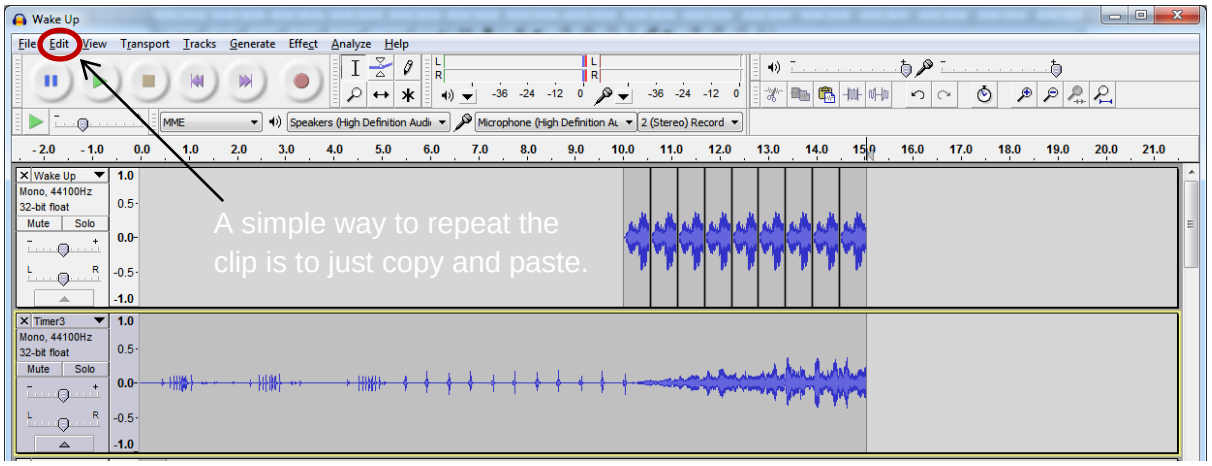




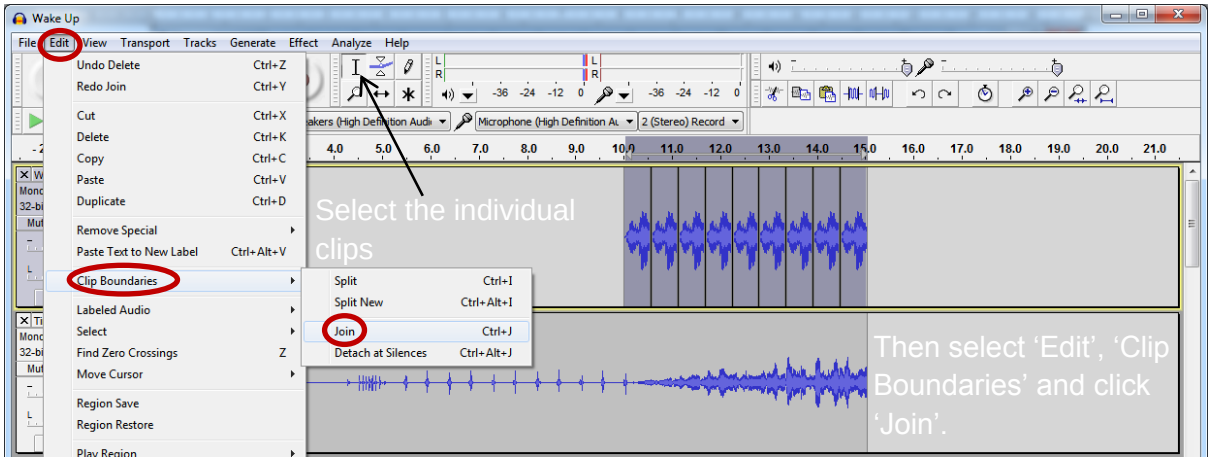
How to start when the alarm ringing begins:

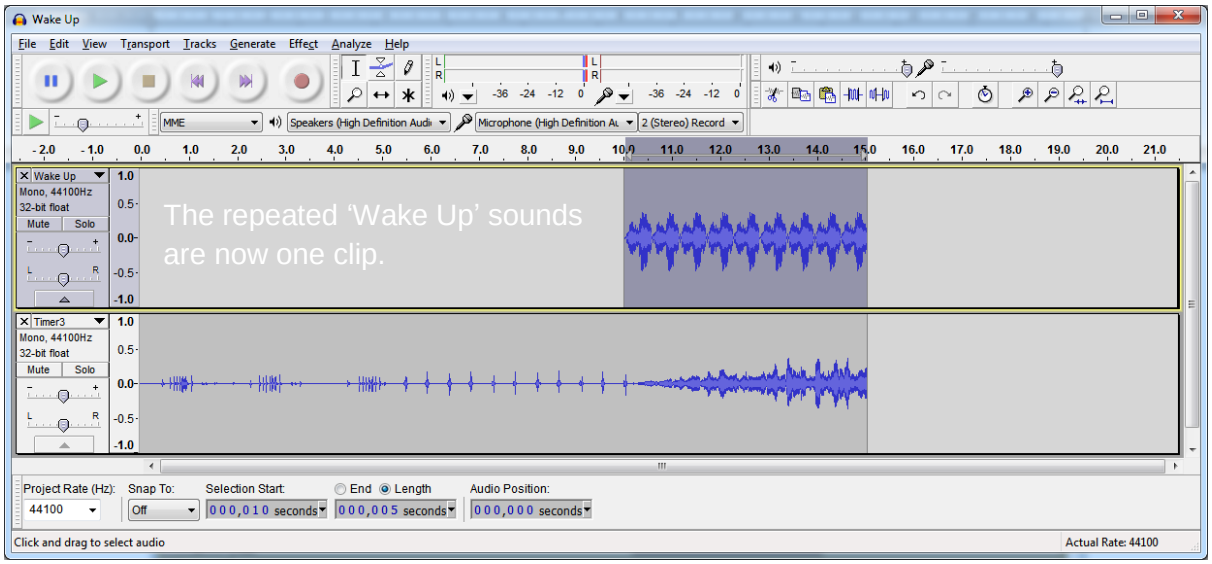


How to repeat the 'Wake Up' clip for the length of the alarm ringing:



This step is not strictly necessary but we can join the individual 'Wake Up' clips to make a single clip.





Export the file in **.mp3** format as **Timer4**.