Clipping, Microphone Placement, and Repairing Clipping

Microphone placement is very important. If you have the microphone too close, the audio will clip. It is called clipping because the tops and bottoms of the waveforms are clipped off.

Instead of paying attention to the waveforms, watch the decibel measurements at the top of the screen. A blue arrow is pointed where you need to look. When you are speaking, you want the decibel level color to be green. This means that you are at a good distance from the microphone. Yellow is a warning, but if it is red like this audio, it means that clipping is taking place and you are too close to the microphone.

If clipping occurs and you have the opportunity to re-record the audio, it is always best to do so. Sometimes you cannot re-record the interview. For instance, if there is clipping in an interview, then you can attempt to repair the clipping. The edited recording will be an improvement, but some distortion will likely be present.

To reduce the clipping, you must first give the recording some space at the top and bottom in order to repair the wave forms. First select the entire audio track by pressing control and A on the keyboard. Then click on Effect and select Amplify. Instead of amplifying the audio, I will be doing the opposite. I will drag the amplification slider down to -10dB, preview the effect, and then click on OK. Notice that there is now space between the waveform and the top and bottom of the track. Next, I will press Control and A on the keyboard again to select the entire track. Then I will click on Effect and select Clip Fix. I will drag the threshold slider of clipping to 100% if it is not already there, or as close to 100% as the software will allow. After previewing
the result, I will click on Ok. If I zoom in on the waveform, it shows that Audacity filled in the missing peaks of the waveforms with curves. This helped reduce the clipping, but when you hear that audio being played, distortion is still present.