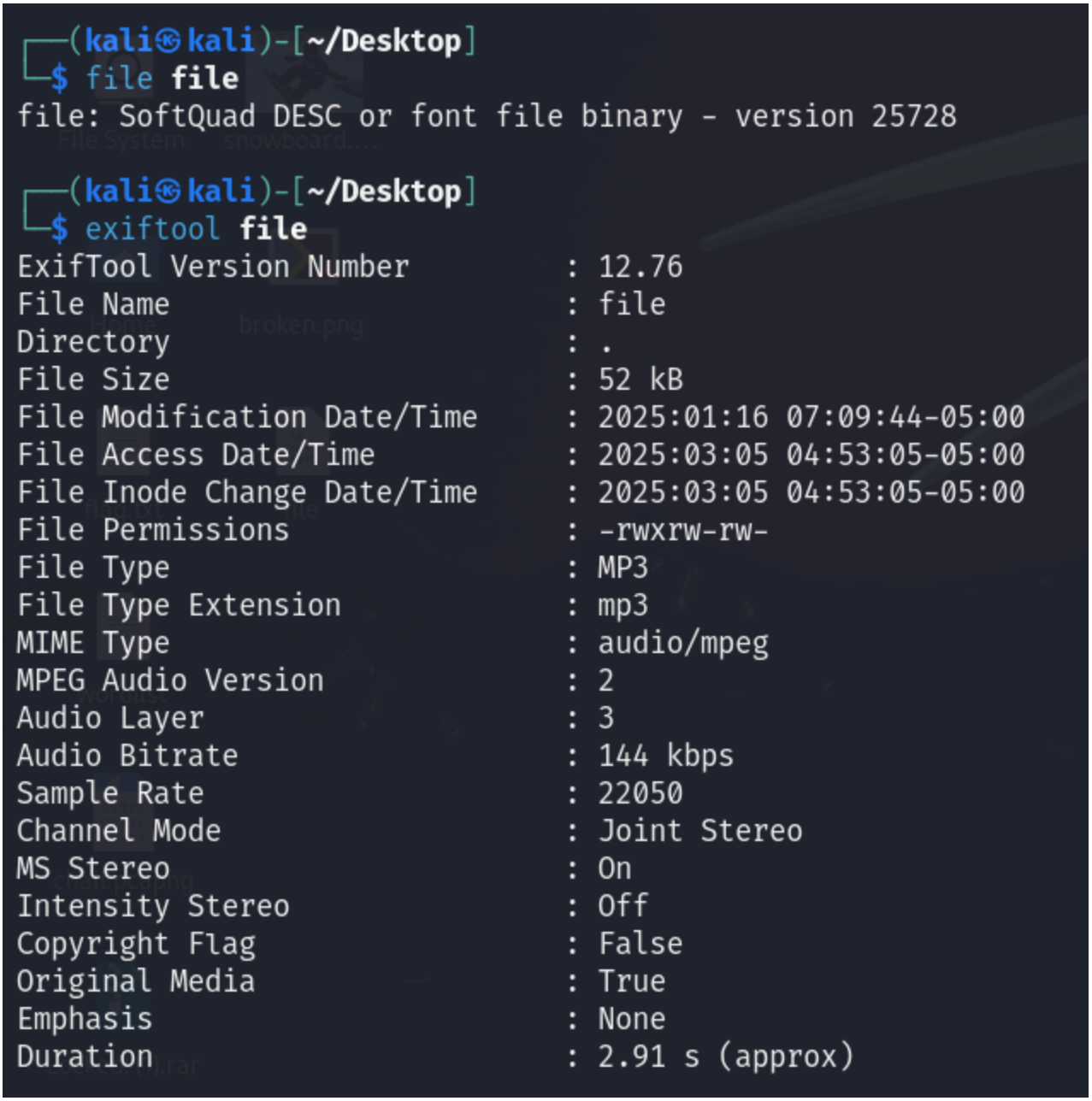
Stamped and Signed Writeup

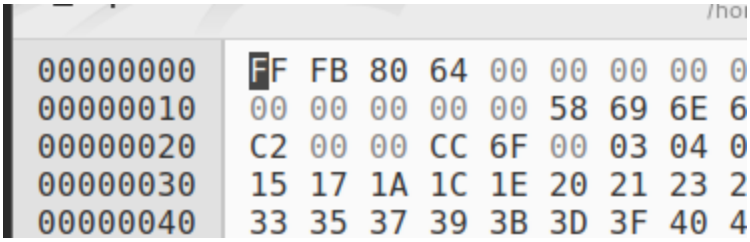
Get given a random file with a changed file signature to look like a font file binary... there's very little two value file sigs so hopefully they'll realise they need to convert it to one of them.. eventually they'll find a format that works and realise quickly its hidden in the spectogram but also reversed.. just to add another step.

Downloading the file and checking its file type and metadata reveals a mix of results, aimed at confusing people with what they're looking at.



If we trust the metadata and that this is an MP3 file, we can assume that the file signature has been replaced. We can then find the MP3 file signature from a website such as https://en.wikipedia.org/wiki/List_of_file_signatures

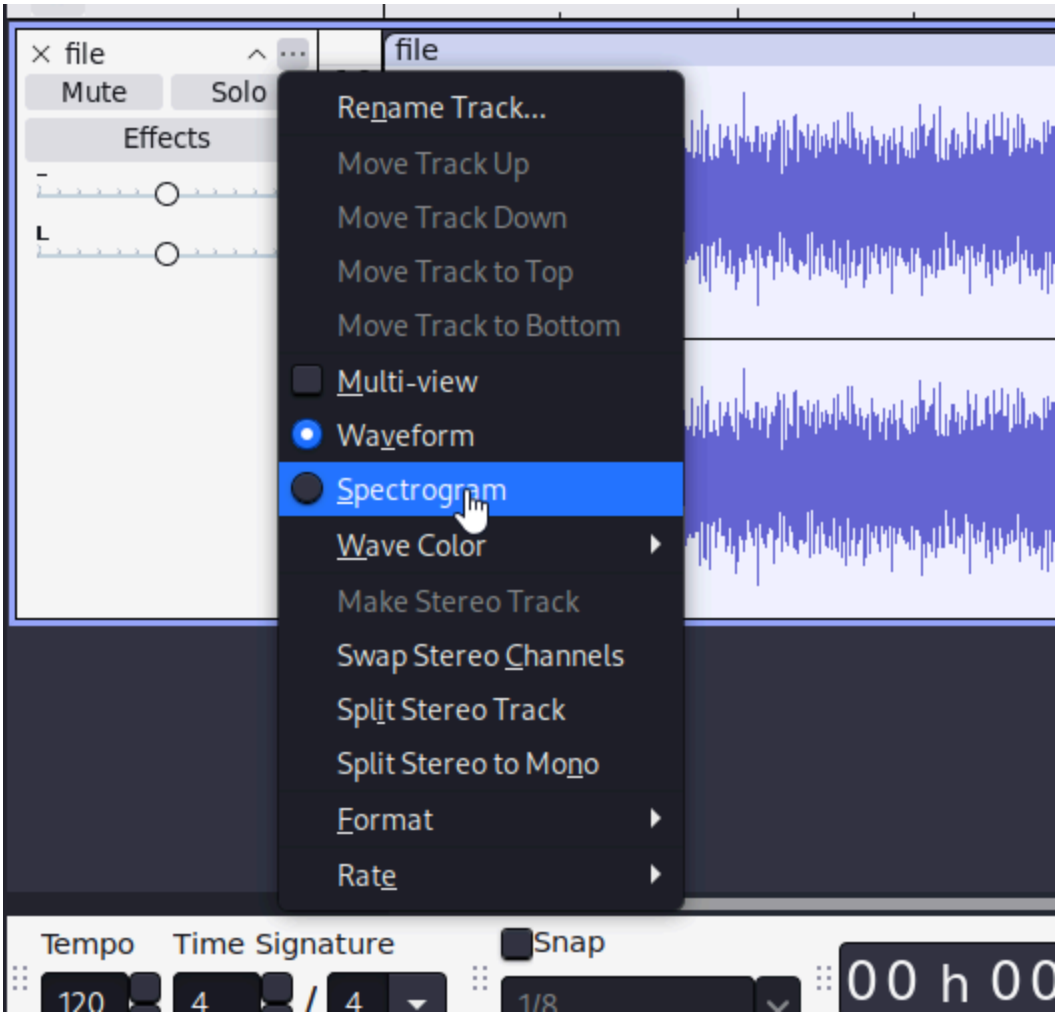
Edit our file to have that signature using a tool such as Ghex



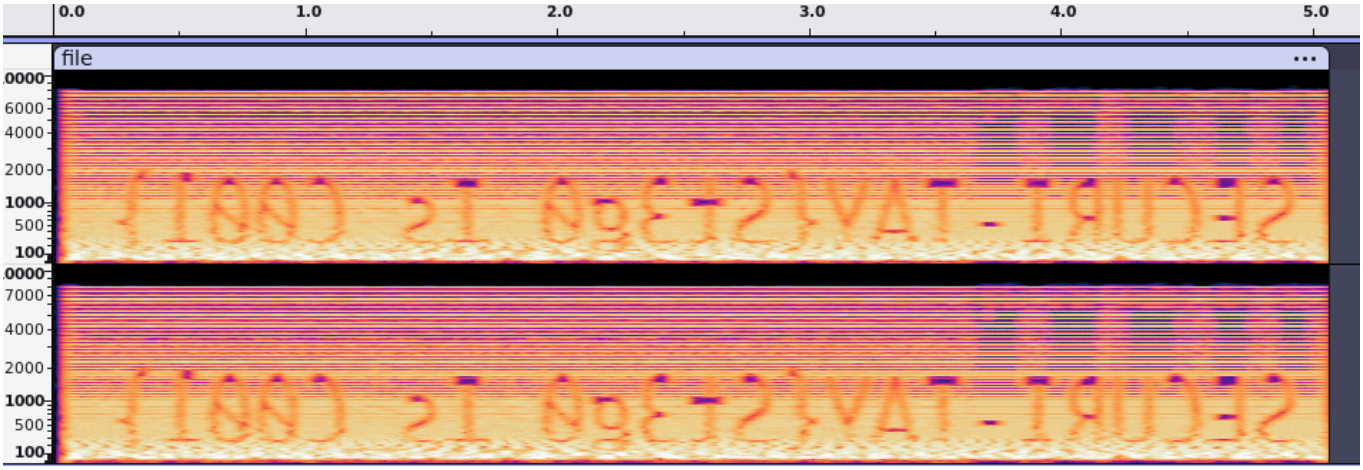
Double check our filetype to ensure we've converted it correctly

```
┌──(kali㉿kali)-[~/Desktop]
└─$ file file.mp3
file.mp3: MPEG ADTS, layer III, v1, 112 kbps, 44.1 kHz, JntStereo
```

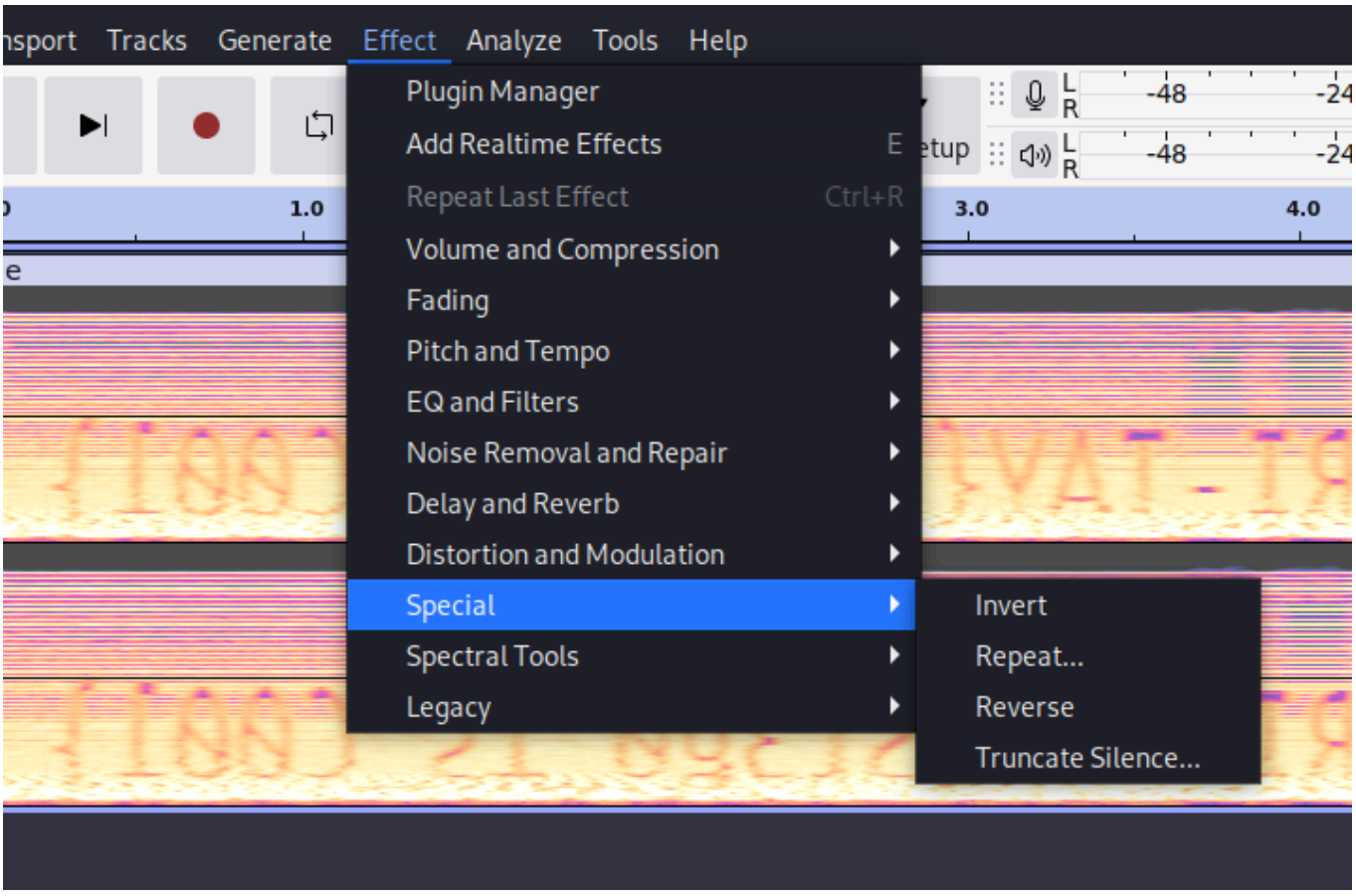
We can then begin exploring this MP3 file. Playing the audio file will come back with some random sounds, nothing of particular interest. We can then look into the Spectogram for the file, to see if anything has been hidden there.

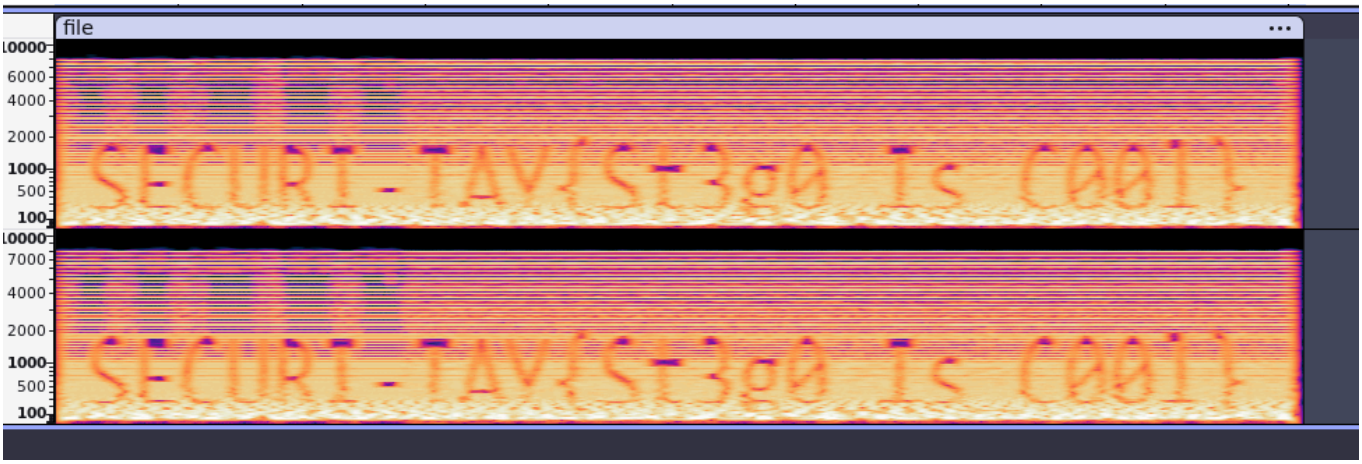


Sure enough, it has been!



We can either type it manually or use the "reverse" feature in Audacity to get our flag in the proper format.





Meaning our flag is `SECURI-TAY{St3g0 Is C00l}`