

P3 – More Python & Video

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Ex 1

Here, I have created a script that starts cutting the bbb video (just the first minute). Then, it extracts the audio file of this portion for being able to convert it in a mono audio file and in a lower bitrate file, in the comments of the script is specified the new bitrate). Also, as it asks to add subtitles, I have created a .srt with the subtitles of the big buck bunny. With a ffmpeg command line it is easy to attach the subtitles to the 1-minute video.

Once we have the three main points ready, for obtaining the final mp4 with both new audios and the subtitles, first I have created a final cut with the new audio files but without subtitles. Finally, I repeated the steps for adding subtitles to this last final cut without subtitles obtaining, this way, the final cut.

Ex 2

In this script I have used the structure of the previous one, as I saw that it would be very suitable. The main difference is that I have divided the script in several functions, each one doing the steps commented in the previous exercise. Finally, I have created a new function called container that calls the other functions.

The user just has to change the input file at the end of the script, and it will create the mp4 container automatically.

Ex 3

This was a difficult exercise, as it asked for several things. I have ended up doing a script that gets the audio and video codecs of an mp4 file and is able to determine with which formats is compatible. I needed some external help, as I had no idea how to begin this exercise. The comments of the script facilitate the understanding of the procedure of this exercise.

Ex 4

This is a mixture of exercises 2 and 3, as exercise 2 is responsible of generating mp4 containers and exercise 3 analyze the results giving the correspondent information.

Ex 5

First of all, I have not been able to create a class, as I developed the previous exercise in a way that is very difficult (for me) to adapt them into a class, as I have looked for the procedure of creating a class in python and I did not understand some steps, as I have poor experience with python.

I understand the initial steps, creating the initial method and the common variables. But I have some functions where you need to introduce 2 variables, as the mixed audios function, and I have not been capable to adapt the class with my functions. The rest of steps are very simple, just use the class inside the main with the relevant functions, as the creation of the container and the function of exercise 3. But, as I said, the only issue that I had was how to deal with the functions that need 2 variables instead of 1.

I have ended up adapting the previous exercise into a `main()`, as it already did everything that we have been seeing during the whole practice.

As I told you in the mail, it has been difficult for me to carry out this practice, I hope it is OK.