

S2 – MPEG4 and more endpoints



- **Use PYTHON only (there might be exceptions)**
 - **Be creative! Feel free to type code as you want**
 - **Don't forget to comment your code to make it understandable if needed**
 - **PEP8 it's a plus**
- <https://www.python.org/dev/peps/pep-0008/>**

- **It's recommended to work with PyCharm or any other IDE**
- **You can INTERPRET as you want the following exercises**
- **It's ALLOWED to COPY from the internet if the script works. Not allowed to copy from mates AND DO NOT USE CHATGPT, COPILOT or any AI**

- **Deliver everything inside a Github link! then share this link in Aula Global**
- **Work with your bestie together. Better github history will increase marks**

1) Download the infamous Big Buck Bunny video

Create a new endpoint / feature which will let you to modify the resolution (use FFmpeg in the backend)

DO NOT UPLOAD VIDEOS INTO GITHUB!

FREE INTERPRETATION - output as you want

2) Create a new endpoint / feature which will let you to modify the chroma subsampling

3) Create a new endpoint / feature which lets you read the video info and print at least 5 relevant data from the video

4) You're going to create another endpoint in order to create a new BBB container. It will fulfill this requirements:

- Cut BBB into 20 seconds only video.**
- Export BBB(20s) audio as AAC mono track.**
- Export BBB(20s) audio in MP3 stereo w/ lower bitrate**
- Export BBB(20s) audio in AC3 codec**

**Now package everything in a .mp4 with FFMPEG!! -
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5) Create a new endpoint / feature which reads the tracks from an MP4 container, and it's able to say (deliver an output) of how many tracks does the container contains

6) Create a new endpoint / feature which will output a video that will show the macroblocks and the motion vectors

7) Create a new endpoint / feature which will output a video that will show the YUV histogram

Thanks

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