EE604: Programming environment setup

Submission

For all the questions, you have been provided with files named **Q{x}_190720.py** and **tester{x}.py** where x denotes the question number. You need to just implement the **solution** function in **Q{x}_190720.py**. The solution function takes input as the path to the respective input file so you must read the input file before any processing.

The tester function takes the output from your function and compares it with the ground truth and assigns a score. This would give you a good idea of how well your code is performing and whether there are any bugs or not.

Additionally, before submitting ensure that you change the filename to **Qx_<your roll number>.py**. Finally, you are required to create a folder named **your roll number** containing only the files **Qx_<your roll number>.py** for each of the questions and then upload this zip file.

Codes will be compared for cross similarity among students, if you are copying or taking-help from same internet source, beware as many will do the same and your code might resemble with other students. So all similar codes will be caught in plagiarism check. Our efforts are to help you learn by doing programming yourself.

Instruction for setting up the environment on Linux/MacOS

You are expected to have a basic knowledge of python coding. It is recommended that you create a new environment and not install the dependencies in your base environment as there might be conflicts between versions of different dependencies. You are supposed to install **python3.10** for the environment setup initially.

Probably you might not be having the module **venv** installed which you can install using,

```
1 sudo apt install python3.10-venv
```

Note the above command might not work if you don't have python version 3.10.
Now, you have to create a virtual environment using the command,

```
1 python3 -m venv ee604
```

Now, you need to activate the above environment.
Ubuntu/Mac users you can do this by the command,

```
1 source ee604/bin/activate
```

Now you need to install the modules in the given **requirements.txt** file,

```
1 pip install -r requirements.txt
```

Instruction for Windows environment setup

Install anaconda

Now, you have to create a virtual environment using the command

```
1 conda create -n ee604 python=3.10 anaconda
```

Now, you need to activate the above environment. For **Windows** users, you can do this by the command

```
1 conda activate ee604
```

Installing required modules

```
1 conda install -c conda-forge opencv
2 conda install -c conda-forge librosa
3 conda install -c anaconda scikit-image
```

You are expected to use only the above modules. Everything is automated, so follow the naming conventions carefully, failing to do so would result in error during your code execution and you wont get any marks.

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