ROB311:

Facial Expression Recognition-KNN

The task is to classify the emotions given a static face image with KNN. Emotions have seven categories (0=Angry, 1=Disgust, 2=Fear, 3=Happy, 4=Sad, 5=Surprise, 6=Neutral). The database contains **48x48** pixel grayscale images of faces. You can download the database from <u>link</u>. To get a good result, you should use the feature extraction technology of image processing, for example, Local Binary Patterns (LBP). LBP library can be found in <u>scikitimage</u>. And you can use the <u>KNN library</u> of <u>scikit-learn</u> directly.

Submit: Report and related code (<u>jupyter notebook</u> format code is recommended). You can use <u>github</u> to submit the link.