

ASSIGNMENT 1

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I have taken help from the following websites:

- <https://www.learndatasci.com/glossary/binary-classification/>
- <https://www.geeksforgeeks.org/ml-logistic-regression-using-python/>
- <https://towardsdatascience.com/logistic-regression-in-python-2f965c355b93>

I have included all the required packages.

I downloaded the crack detection csv file and uploaded the same on google colab files then read the same using csv file.

Drawn a seaborn plot for better visualization.

I have split the data with 60% train and then remaining data divided into 50-50 % i.e. 20% validation 20% test.

I have then imported accuracy score and calculated F1 score with 5 precisions which came out to be 0.86301

About some problems I faced is that I earlier tried using the following approach

```
# input X = df.iloc[:, ["mean_r", "mean_g","mean_b"]].values
```

```
# output y = df.iloc[:, "label"].values
```

But it gave an indexing error sort of so tried another approach