

## Assignment 5

Title : Implement normalization on dataset

Theory :

Data normalization in Python

Normalization refers to rescaling real-valued numeric attributes into a 00 to 11 range

Data normalization is used in machine learning to makes model training less sensitive to the scale of features. This allows our model to coverage to better weights & in turn leads to a more accurate model.

Normalization makes the feature more consistent with each other, which allow the model to predict outputs more accurately.

Conclusion-

Thus, we have studied normalization on data set.

```
In [1]: from sklearn import preprocessing
import numpy as np

a = np.random.random((1, 4))
a = a*20
print("Data = ", a)

# normalize the data attributes
normalized = preprocessing.normalize(a)
print("Normalized Data = ", normalized)

Data = [[ 3.75379543  0.07905371 15.8351011  4.999774  ]]
Normalized Data = [[0.22048924 0.00464343 0.93011712 0.29367513]]
```

```
In [ ]:
```