

## **Practical based on Machine Learning using Python**

### **Assignment: Handling Catagerial & Numerical Data and Feature Engineering**

- Load the data set for Bike Rentals
- For season, convert the categorial data into numeric value using following:  
season (1:springer, 2:summer, 3:fall, 4:winter)
- Scale the count of casual users in the range of 1 to 5
- Scale the count of registered users with variance as 1 and mean as 0
- Find the outliers with the contamination as 0.2
- Convert the humidity into binary from the discrete value. If the humidity is below 0.5, it shoule be 0 else 1
- Classify the column of windspeed intodifferent classes based on the value. The bins should be 0.25,0.50,0.75
- Apply PCA to last 9 attributes and engineer it to 2 attributes.
- Compare the total number of attributes before PCA and after PCA