Assignment ML Workshop

1	Create a dataset having following features- experience of the candidate, written score, interview score and salary. Based on three input features, HR decide the salary of the selected candidates. Using this data, build a machine learning model for HR department that can help them decide salaries of the candidates. Using the built model, predict the salaries for the following candidates: (a) 5 Yrs experience, 8 written test score, 10 interview score (b) 8 Yrs experience, 7 written test score, 6 interview score
2	Create a dataset having following features- Graduations percentage, experience of the candidate, written score, interview score and selection. Selection feature is binary in nature and contains the status of the candidate. Also store at least 25 records in this dataset. Using this data, build a Logistic Regression model for HR department that can help them to decide whether the candidate will be selected or not. Take 80% data as training data and remaining a testing data randomly. Using the built model, predict the status for the following unseen data: (a) 90 %, 5 Yrs experience, 8 written test score, 10 interview score (b) 75%, 8 Yrs experience, 7 written test score, 6 interview score Also calculate the possible classification metrics for the above cases and save these values in the .CSV file by executing the model at least 5 times.
3	Do the exercise no 2, for KNN, SVM and Naïve Bayes models. Apply cross validation and check the output with different segments and store the predicted output in a .csv file.
4	Write a python code to Implement the SVM classifier on Breast Cancer Dataset using scikit-learn. Also check the accuracy of the model. Note: Dataset is available on https://www.kaggle.com/uciml/breast-cancer-wisconsin-data
5	Write a python code to Implement the KNN classifier on Glass Type Classification dataset using scikit-learn. Also check the accuracy of the model. Note: Dataset is available on https://www.kaggle.com/uciml/glass