2nd Sep 2019

**Attendance: 10%, Continuous evaluation: 70%, Viva-20%**

**Assignment No. 2**

1. Download Titanic Dataset (<https://www.kaggle.com/heptapod/titanic/version/1#>) and use Support Vector Machine (SVM) for classification.
2. Show the overfitting and underfitting problem using SVM(use regularization technique) and analyze by graph (use matplotlib) .
3. Using the same dataset and run Decision Tree classifier, Logistic Regression, Boosting for classification task.
4. Compare the accuracy value of all the classifiers and plot it in histogram. (Using matplotlib)
5. Download Forest Cover Type dataset (<https://www.kaggle.com/uciml/forest-cover-type-dataset>) and preprocess the dummy variables to create training, test and development set.
6. Apply multiclass classification in SVM using Forest Cover Type dataset.
7. Plot and Analyze the Confusion matrix for the above applied SVM method.

Submit a report with results.