

# **Data Driven Computing and Networking (DDCN-2019)**

## **Classification using Neural Network- Multi Layer Perceptron Classifier (NN-MLPCLASSIFIER)**

### **A. Write a python script to perform the following tasks:-**

1. Import all the required packages to implement MLP Classifier
2. Import required package for dataset named breast\_cancer and load it in a variable cancer.
3. Create Feature set from column named “data” and Target set from column named “target” from the retrieved data set and store them in variables X and y respectively.
4. Split both Feature set and target set into training set and test set and store them in X\_train,y\_train,X\_test,y\_test
5. Standardize features by removing the mean and scaling to unit variance and store result in a variable “scalar”
6. Fit scaled data using feature training data set
7. Transform Training and Test data of feature set
8. Instantiate MLPClassifier with hidden layer size(30,30,30) and store the created model in a variable “mlp”
9. Fit MLP Classifier on Training Data of Feature set.
10. Perform Prediction on Testset data of feature set.
11. Print “Confusion Matrix”
12. Print “Classification Report”