Lab Assignment 7

Machine Learning (UML501)

Note: Required datasets are on LMS

Q 1	Use the weather dataset to implement the decision tree. Try different available parameters of the inbuilt method.
Q 2	Implement SVM by taking Boston dataset by dropping (using correlation) the least significant feature and tune the values of C and gamma parameters. Write your own function to find the correlation between an input feature and out feature.
Q3	Implement K means clustering by using Mall Customers dataset, by making different clusters. Save the model evaluation parameters in CSV file, for each of the cluster.
Q4	Implement Hierarchical clustering means clustering by using Mall Customers dataset, by making different clusters. Save the model evaluation parameters in CSV file, for each of the cluster.
Q5	Implement ANN on Diabetes dataset by taking different hidden layers, Relu as activation function in the hidden layer and sigmoid as output. Store the weights in a CSV file.
Q6	Implement ANN on Breast Cancer dataset by taking different hidden layers, Relu as activation function in the hidden layer and sigmoid as output. Store the weights in a CSV file.