Machine Learning Lab, B.Tech 5th Semester

Instructions

1. This is only for practice. Complete it by 12:00 PM today. Your completion will be reviewed by the Teaching Assistants.

Practice Assignment 2

1. (a) Create a dataset of size 30x2, where the first column represents the number of hours of sunshine and the second column represents the number of ice creams sold.

   i. Write a Python program to display the first five rows. Print the total number of rows and columns in the dataset, and the range of each feature's values.

   ii. Write a Python program to randomly split the dataset into training and testing sets using the following ratios: 70-30,80-20,90-10.

   iii. Apply Simple Linear Regression to predict the number of ice creams sold based on the number of hours of sunshine. Report which training and testing split yields the best results. Validate your model using the Mean Squared Error (MSE).

   Note: You are not allowed to use inbuilt function of any machine learning model.