

Training Day-13 Report:

Data Preprocessing in Python:-

In order to derive knowledge and insights from data, the area of data science integrates statistical analysis, machine learning, and computer programming. It entails gathering, purifying, and converting unstructured data into a form that can be analysed and visualised. Data scientists process and analyse data using a number of methods and tools, such as statistical models, machine learning algorithms, and data visualisation software. Data science seeks to uncover patterns in data that can help with decision-making, process improvement, and the creation of new opportunities. Business, engineering, and the social sciences are all included in this interdisciplinary field.

Data Preprocessing:-

Pre-processing refers to the transformations applied to our data before feeding it to the algorithm. Data preprocessing is a technique that is used to convert the raw data into a clean data set. In other words, whenever the data is gathered from different sources it is collected in raw format which is not feasible for the analysis.

Steps in Data Preprocessing:-

Step 1: Import the necessary libraries.

Step 2: Load the dataset

Step 3: Statistical Analysis

Step 4: Check the outliers:

Step 5: Correlation

Step 6: Separate independent features and Target Variables

Step 7: Normalization or Standardization