

EduNet Assignment 1

1.What is Machine Learning?

Machine Learning (ML) is a method of teaching computers to make predictions or decisions based on data. It works by finding patterns or relationships within the data and using those patterns to make predictions on new, unseen data.

2.What is Supervised Machine Learning Algorithm?

A **Supervised Machine Learning Algorithm** is a type of ML where the model is trained on **labeled data** . Each input comes with a known output. The algorithm learns the relationship between the input data and the target so it can predict the output for new data.

 **Example: Cricket Match Prediction**

Output:

Predict whether a **cricket team will win or lose** a match.

Input Data :

- Team batting first
- Runs scored in first innings
- Pitch type (e.g., batting-friendly, bowling-friendly)
- Weather (sunny, rainy)
- Toss winner

3.What is Regression and Classification?

Regression is used when we want to predict a number.

Classification is used when we want to predict a category or label.

Regression Example (Salary Prediction):

We use regression to predict someone's salary based on things like:

- Years of experience
- Education level
- Skills

Output: ₹50,000, ₹1,00,000, etc. (a number)

Classification Example (Cricket Match):

We use classification to predict whether a cricket team will Win or Lose, based on:

- Team
- Pitch
- Weather

Output: Win or Lose (a category)