# Class\_09.04.2023\_Machine\_Learning

# April 10, 2023

## Types Of Machine Learning

- Supervised Learning
- Unsupervised Learning
- Reinforcement Learning

#### Supervised Learning

# Weather Forecasting

Attributes/features/independent variable

- Humidity
- Previous day's Humidity
- Temparature

End Goal / Target variable / dependent variable

- Rain
- Not Rain

## Unsupervised Learning

- Shape of the object
- The colour of the object
- weight of the object
- Orange
- Apple
- Watermelon

## Reinforcement Learning

- Learning from examples

#### Regression Problems

- Linear Regression
- Data of employees -
  - Emp name

- Emp age
- Emp designation
- Emp rating
- Emp present salary
- Manager feedback
- Target variable (Continuous in nature)
  - Salary for next fiscal
  - 45500
  - 46800

#### Classification Problem

- Data of employees -
  - Emp name
  - Emp age
  - Emp designation
  - Emp rating
  - Emp present salary
  - Manager feedback
- Target variable -
  - Apprasail Rating
  - A , A+ , B , B+

# Recommender System / Reccomendation System

- Content Based
- Collaborative filtering

## Content based

- Friends
  - cast david schwimer , jennifer aniston
  - genre sitcom
  - episode length 20 mins

#### Collaborative Filtering

- users also watched
- netflix making a group of 5 people based on the content they are watching
- 01st april 8th april , 5 people , a,b,c,d,e "catch me if you can" , "philadelphia" , "
- 01st april 8th april , f "catch me if you can" , "philadelphia" -- "Sully"