

# Task 4

## ML Problem Types

**Marks: 20**

**Time: 15 minutes**

This task is based on your real-world understanding and ability to identify what kind of problem it is. Identify the type of ML problem. Mention whether a problem is Classification / Regression / Clustering / Association / Reinforcement type.

**List the type of problem for the problems you specified in Task3 for the following domains**

S.No	Healthcare	Type
1	Disease Dignosis - identifying features from images and data	Classification
2	Patient Risk Prediction - Lifestyle, medical history and family history	Classification
3	Mortality Prediction - Mortality risk depending on medical conditions	Regression
4	Medication Tolerance - How much is too much	Classification
5	Risk of Readmission - How likely patient may have to go back to hospital in a short time span	Regression

S.No	Education	Type
1	Student Dropout prediction	Classification
2	Course Enrollment base on preference and grades	Classification
3	Student Grade Prediction	Regresssion
4	Identifying Learning Disabilities	Classification
5	Automated Grading	Classification / Regression



S.No	Banking	Type
1	Credit Scoring / Improving	Classification / Regression
2	Fraud Detection	Classification
3	Risk Management	Classification / Regression
4	Loan Default Detection	Classification
5	Investment Projections	Regression

S.No	E-Commerce	Type
1	Sales Forecasting	Regression
2	Product Recommendation	Association
3	Product Return Prediction	Classification
4	Inventory Turnover Forecast	Regression
5	Price Elasticity Modeling	Regression

S.No	Your Problems	Type
1	Energy Consumption Forecast	Regression
2	Online Shipping Recommendations	Association
3	Smart Home Automation	Reinforcement
4	Traffic Congestion Prediction	Regression
5	Spam Email Detection	Classification

