

# Task 3

## ML Problem Identification

**Marks: 20**

**Time: 15 minutes**

This task is based on your real-world understanding and ability to identify whether a problem can be solved by Machine Learning or not. Identify and fill problems that you feel can be solved with Machine Learning and also mention the difficulty level of solving using Machine Learning, if it can be solved.

**List a set of problems that you think AI/ML can solve in these following domains**

S.No	Healthcare	Difficulty
1	Disease Diagnosis: Early and accurate diagnosis of diseases such as cancer, diabetes, and cardiovascular conditions.	Moderate to Difficult
2	Drug Discovery: Identifying and designing new drugs and therapies for various diseases.	Extremely Difficult
3	Mental Health Monitoring: Developing tools for continuous monitoring and early intervention in mental health conditions.	Moderate

S.No	Education	Difficulty
1	Student Performance Prediction: Predicting student success or failure and identifying students at risk of dropping out.	Moderate
2	Adaptive Testing: Creating adaptive assessments that adjust difficulty based on a student's performance.	Moderate
3	Educational Data Security: Ensuring the security and privacy of student and teacher data in educational systems.	Moderate to Difficult



S.No	Banking	Difficulty
1	Credit Scoring: Assessing the creditworthiness of loan applicants based on their financial history and other data.	Moderate
2	Fraud Detection: Identifying fraudulent transactions and activities to prevent financial losses.	Moderate to Difficult
3	Risk Management: Assessing and managing financial risks associated with investments, loans, and portfolios.	Moderate to Difficult

S.No	E-Commerce	Difficulty
1	Product Recommendation: Recommending products to customers based on their browsing and purchase history.	Moderate
2	Customer Segmentation: Grouping customers based on behavior, preferences, and demographics for targeted marketing and product recommendations.	Moderate
3	Personalized Shopping Experience: Personalizing the entire shopping journey, including homepage customization, content recommendations, and email marketing.	Moderate

S.No	Your Problems	Difficulty
1	Travel Planning: Planning trips, finding deals, and optimizing travel itineraries.	Moderate
2	Relationship and Dating: Navigating relationships, dating, and compatibility.	Moderate
3	Time Management: Optimizing your daily schedule and tasks for maximum productivity and work-life balance.	Moderate

