Problem Identification Assignment

A company works with number of employees, all the works are dependents on the employees. Even if one of the employees resign the job immediately then assigned work will be not finished at the time, so delivery of the project to the clients will be delayed. Company planned to make solution for this, they want to know which employee may resign next. If they know previously, they can arrange alternative to avoid such problem. As an AI Engineer you must give Solution to this.

A) How will you achieve this in AI?
B) Find out the 3 -Stage of Problem Identification
C) Name the project
D) Create the dummy Dataset.

A.How will you achieve this in AI?

To predict which employee might resign next and help the company avoid project delays, So here I can use **machine learning classification approach**.
Have to collect the Employee data's and check the possibilities of resigning their job.

INPUTS
Employee date like
- Age
- Years of Working
- Salary
- Last promotion
- Performance rating
- Job satisfaction
- Workload hours
- Recent promotion

Objectives to resign the job
- Low Job satisfaction
- High workload hours
- Low salary
- No recent promotion

OUTPUT
Resigned or Stayed

B) Find out the 3 -Stage of Problem Identification

Stage-1
Domain selection- **Machine Learning**
(Here All the inputs are in Number form)
Stage-2
Learning selection- **Supervised Learning**

(Inputs data are given and the output is to be resigned or stayed ,So the requirement is very clear)
Stage-3
Problem Identification- **Classification**
(The output is going to be a categorical data like resign or Not-resign)

C) Name the project

FORE-RESIGN PREDICTION

D) Create the dummy Dataset.

Recent promotion (Years ago)
Job satisfaction [Scale 0-5]
Performance rating[Scale 0-10]
Workload hours(Weekly)
Resigned-1,Stayed-0

INPUTS								OUTPUT
EID	AGE	YEARS OF WORKING	SALARY	RECENT PROMOTION	JOB SATISFACTION	PERFOMANCE RATING	WORKLOAD HOURS	RESIGNED OR STAYED
E01	30	5	20,000	2	4	8	55	0
E02	38	2	28,000	1	4	7	48	0
E03	42	8	32,000	4	2	4	60	1
E04	29	1	16,000	0	3	5	59	1
E05	35	7	25,000	3	4	7	48	0

Here the above output column predicts the **E03** and **E04** have high possibilities to resign the job next …