Scenario Based Learning

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 this month or 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) Gather employee data and build a predictive model using a **classification approach** to identify the likelihood of resignation.

B) Machine Learning Type: *Supervised Learning – Classification*

- **Stage 1: Machine Learning** → We plan to collect and analyze employee-related data in text or numeric form.
- **Stage 2: Supervised Learning** → Both input (employee attributes) and output (resignation status) are available.
- **Stage 3: Classification** → Since the output is categorical (e.g., *Yes/No* for resignation), a classification model is appropriate.

C) Project Name: *Employee Resignation Prediction*

D)

Employee ID	Resignation status	Status (prediction)
EMPID_001	**yes**	**RESIGN**
EMPID_002	**no**	**UN RESIGN**