**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 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?

Dataset will be numerical we can use Machine Learning haa domain

Prediction:

to predict employee resignations and plan alternatives. Based on years of experience, domain expertise, Status of employee(whether he will resign or not).

Call to Action:

If an employee is going to resign allocate new resource or assign task to respective domain person based on years of experience otherwise no action is needed

B) Find out the 3 -Stage of Problem Identification

Domain Selection: Machine Learning

Learning Section:

We have input feature has Employee details such as years of experience,domain knowledge and output as status of employee(whether he will resign or not)

3rd stage:

Input and Output has defined and requirement has clear we can use Supervised also output has categorical so we can use Supervised learning Classification

C) Name the project

Predicting Employee Resignations to Ensure project delivery without any impact

D) Create the dummy Dataset

| Employee Name | Year of Experience | No of Domain Knowledge Expertise | Resign Status | Assign Task to Exising Employee based on respective domain knowledge | Needed New Employee |
| --- | --- | --- | --- | --- | --- |
| Arun | 5 | 4 | No | Yes | No |
| Arjun | 8 | 7 | No | Yes | No |
| Kavitha | 3 | 3 | Yes | No | Yes |
| Prema | 2 | 2 | Yes | No | Yes |

Output has categorical feature has resign status as Yes/No  
We will use classification method from super vised learning to predict the model in machine learning domain.