1. Problem Identification Assignment – Asvin

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.

Answers:

A) How will you achieve this in AI?

1. End Goal Identification - Resignation Prediction (Employee will resign or not)

2. Data Collection – Collecting the past resignation & non resignation status of the company.

3. Data Preprocessing- Cleaning and preprocessing the data given by the company using data science.

4. Model Creation- Creating the AI model by choosing the right domain & learning method.

5. Prediction – The learned AI model will predict the employee who will resign in next week or month.

6. Call to Action – Show or Display which employee will resign in next month.

B) 3-Stages of Problem Identification?

1. Domain Selection – Input of the employee details datasets in the format of text & numerical format most of the data in numbers so it comes under **"Machine Learning"** domain.

2. <u>Learmning Selection</u> – Requirement is clear that we gonna predict the employee will resign or not. Also the past resignation and non resignation data sets given by the company has clear input and output. So it comes under **"Supervised Learning"**.

3. Classification or Reggresion – The output will be in the format of whether the employee will resign or not (yes or no) so it comes under **" Classification"**

C) **Name of the Project ?**

   " AI MODEL FOR EMPLOYEE RESIGNATION PREDICTION "

D) **Dummy Datasets ?**

INPUT				OUTPUT
Employee ID	**Work engaement Score**	**Performance Score**	**Absenteesim In days**	**Resignation status**
1	High	High	2 days	**No**
2	Low	Low	5 days	**Yes**
3	Medium	Medium	3 days	**No**
4	Low	Low	4 days	**Yes**
5	High	High	1 days	**No**