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?

This can be achieved in using Machine Learning Algorithm using supervised learning classification techniques

B) Find out the 3 -Stage of Problem Identification

Stage 1: Domain Selection:

The dataset going to be used is numerical data hence the domain Machine Learning is used to design a model to predict the output

Step 2: Learning Selection:
The output of the above problem statement is very clear that the AI should predict that the employee will resign or not not resign and the input is also available. Hence we use Supervised learning Method

Step 3: Classification or Regression:
The output we are going to predict is going to be categorical (resign or not resign) hence the classification method is used

C) Name the project: Employee Attrition Predicition

D) Create the dummy Dataset.

Employee ID	Age	Gender	Years at Company	Job Role	Monthly Income	Work-Life Balance	Job Satisfaction	Performance Rating	Number of Promotions	Overtime	Distance from Home	Attrition
52685	36	Male	13	Healthcare	8029	Excellent	High	Average	1	Yes	83	Stayed
30585	35	Male	7	Education	4563	Good	High	Average	1	Yes	55	Left
54656	50	Male	7	Education	5583	Fair	High	Average	3	Yes	14	Stayed
33442	58	Male	44	Media	5525	Fair	Very High	High	0	Yes	43	Left
15667	39	Male	24	Education	4604	Good	High	Average	0	Yes	47	Stayed

3496	45	Female	30	Healthcare	8104	Fair	High	Average	0	No	38	Stayed
46775	22	Female	5	Healthcare	8700	Good	High	Average	0	No	2	Stayed
72645	34	Female	15	Technology	11025	Fair	Medium	High	1	No	9	Left
4941	48	Female	40	Technology	11452	Good	Medium	Below Average	0	No	65	Stayed
65181	55	Female	16	Media	5939	Poor	High	Average	0	No	31	Stayed