

A) How will you achieve this in AI?

To predict employee resignation, I will use **Machine Learning (ML) classification models**. The steps involved are:

Data Collection: I will use company's existing data about employees resignation status based on Job_Role, Salary, Tenure (Years), Work_Life_Balance, Promotion (Last 2 Years) Performance to **predict** current/given employee resignation probability.

Model Selection: I will decide based on Domain Selection, Learning Selection and Classification / Regression.

B) Find out the 3 stages of Problem Identification

Stage 1: Domain Selection

Machine Learning or Deep Learning

Stage 2: Learning Selection

Supervised Learning (Input and Output are Well Defined and Requirement is clear)

Stage 3: It falls under Classification

C) Name the Project

Employee Attrition Predictor

D) Dummy Data Set

Employee_ID	Age	Job_Role	Salary	Tenure (Years)	Work_Life_Balance	Promotion (Last 2 Years)	Performance	Resigned (Target)
101	25	Software Eng	50,000	1.5	Poor	Yes	Average	Yes
102	30	Data Analyst	70,000	2	Good	No	High	No
103	27	Test Engineer	65,000	4	Average	No	Low	Yes
104	35	Project Lead	90,000	5	Good	Yes	High	No
105	29	Senior Software Enginner	80,000	6	Excellent	Yes	Average	No