**PROBLEM STATEMENT:**

A company works with a number of employees, the work is only dependant on the employees, Even if of the employees leave the company, the delivery might be delayed, company is planning to make a 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 musy give a solution to this

A) How will you achieve this in AI? - **To predict employee resignations, I suggest machine learning with supervised learning, and a classification algorithm. That would fit here as we have the I/P and O/P Labels clearly and the dataset is in text format.**

B) Find out the 3-stage of problem identification? – **ML 🡪 SL 🡪 Classification Algorithm**

C) Name the project – **Employee Proactive Resignation Prediction**

D) Create the Dummy dataset

| **Employee ID** | **Tenure (months)** | **Job Satisfaction** | **Performance Rating** | **Leaves Taken** | **Likely to Resign** |
| --- | --- | --- | --- | --- | --- |
| E001 | 24 | 7.5 | 4.2 | 5 | No |
| E002 | 12 | 5.0 | 3.8 | 8 | Yes |
| E003 | 36 | 9.0 | 4.5 | 3 | No |
| E004 | 18 | 6.0 | 4.0 | 6 | Yes |
| E005 | 30 | 8.5 | 4.7 | 4 | No |