

A company works with number of employees, all the works are dependent on the employees. Even one of them resign the job, then the work will be in pending and delivery of the project to the client will be delayed. Company planned to make a solution for this, they want to know which employee may resign. If they know in prior, they can arrange alternative to avoid such problem.

A) How will you achieve this in AI?

- 1. **Analysing:** Check the raw data given by the company about the Employees and analyse the scenario.
- 2. **Sorting:** Sort the required inputs for the targeted output from the analysed data
- 3. **Identifying:** Identify the targets based on the sorted scenario.
- 4. Identify the domain and which technique to perform
- 5. Execute the call to action

B) Find out the 3-stages of problem identification?

Stage 1- Domain identification

Since the majority of the prediction is based on statistical data the domain could be Machine Learning

Stage 2- Learning Selection

The data set has all the data present and employee termination details can be predicted, so we can select supervised learning.

Stage 3- Regression or Classification

As the output is categorical information, the technique to be used is Classification

C) Name the project

Employee self-termination Identification program

D) Create a dummy dataset

E-ID	Name	Age	Gender	Designation	Grade	Yrs of Exp	Monthly Salary	Work culture Feedback rating out of 10 by Employee	Performance rating by Manager	Last Promotion (in Years ago)	Marital Status	Trying to switch over
AB012	Santhosh K	35	M	Sr. Engineer	S3	7	85,000	8	7	1	Married	No
AB014	Rethna S	30	M	HR &Admin	S2	5	56,000	7	6	1	Married	No
AB015	Pavithra S	28	F	Jr. Engineer	S2	4	40,000	6	4	2	Married	Yes
AB028	Ranjith H	28	M	Jr. Engineer	S1	3	32,000	8	4	1	Unmarried	No
AB029	Indhu M	27	F	Jr. Engineer	S1	3	32,000	8	3	0	Unmarried	No
AB030	Renu R	26	F	Jr. Engineer	S1	2	25,000	5	2	0	Unmarried	Yes