**Problem Identification Assignments**

**Problem Statement:**

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.

**Solution:**

A) How will you achieve this in AI?

Monitor the pattern of their Attendance to work and if the Employee increases his/her absenteeism, then naturally he will resign in near future.

B) Find out the 3 -Stage of Problem Identification

Stage-1: Machine Learning

Stage-2: Supervised

Stage-3: Classification (Resign / Not Resign)

C) Name the project

**EMPLOYEE RETENTION PREDICTION**

D) Create the dummy Dataset.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Name** | **Days Absent** | | | | | **Status** |
| **Jan** | **Feb** | **Mar** | **Apr** | **May** |
| Emp01 | 0 | 1 | 2 | 6 | 10 | Will Resign |
| Emp02 | 2 | 0 | 1 | 1 | 1 | Not Resign |
| Emp03 | 2 | 0 | 5 | 11 | 10 | Will Resign |
| Emp04 | 1 | 0 | 1 | 0 | 1 | Not Resign |
| Emp05 | 3 | 0 | 3 | 0 | 2 | Not Resign |