a). How will you achieve this in AI ?

***Input data are –***

1. Employee ID #
2. IT experience(years)
3. Salary (LPA)
4. Performance Rating (Out of 5)
5. Employer Feedback

By applying above inputs to the model and based on some factors, the model can predict the required output (whether the employee is going to resign or not).

***Output data is –*** employee will Resign / 1 or employee will not Resign / 0

b).Find out 3 stage of Problem Identification ?

Stage 1 – Machine Learning

Explanation : As most of the input details are in numerical format and employer feedback can be categorized. So domain can be selected as Machine Learning

Stage 2 – Supervised Learning

Explanation : Company’s requirement is clear. Input data and output data are present.

Stage 3 – Classification

Explanation : Here the predicted Output will be either “Resign” or “Not Resign”, So the output will be a categorical data.

c). Name of the project : Early Prediction of Resource Resignation

d). Create the dummy dataset:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Employee ID # | IT experience(years) | Salary (LPA) | Performance  Rating(Out of 5) | Employer Feedback | Model Predicted Output Data |
| 12345 | 5 | 15 | 4 | Excellent | Resign / 1 |
| 74185 | 8 | 20 | 3 | Meet Expectation | Not Resign / 0 |
| 98653 | 10 | 24 | 5 | Out Standing | Not Resign / 0 |
| 52634 | 4 | 12 | 4 | Excellent | Resign / 1 |
| 65234 | 6 | 16 | 3 | Meet Expectation | Not Resign / 0 |