**Employee Attrition Problem**

<https://www.dropbox.com/s/we2aj8k6ra7ca5o/Hash-Analytic-Python-Analytics-Problem-case-study-1.xlsx?dl=0>

**Description:**

|  |
| --- |
| The data is for company X which is trying to control attrition. There are two sets of data: “Existing employees” and “Employees who have left”. Following attributes are available for every employee. |
| Satisfaction Level |
| Last evaluation |
| Number of projects |
| Average monthly hours |
| Time spent at the company |
| Whether they have had a work accident |
| Whether they have had a promotion in the last 5 years |
| Departments (column sales) |
| Salary |
| Whether the employee has left |
|  |
| **Objective** |
| What type of employees are leaving? Determine which employees are prone to leave next. Present your results in the presentation sheet’s presentation area. |

**EXISTING EMPLOYEE TABLE: (HEAD)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Emp ID | satisfaction\_ level | last\_ evaluation | number\_ project | average\_ montly\_ hours | time\_ spend\_ company | Work\_ accident | promotion\_ last\_ 5years | dept | salary |
| 2001 | 0.58 | 0.74 | 4 | 215 | 3 | 0 | 0 | sales | low |
| 2002 | 0.82 | 0.67 | 2 | 202 | 3 | 0 | 0 | sales | low |
| 2003 | 0.45 | 0.69 | 5 | 193 | 3 | 0 | 0 | sales | low |
| 2004 | 0.78 | 0.82 | 5 | 247 | 3 | 0 | 0 | sales | low |

**EX-EMPLOYEE TABLE : (HEAD)**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Emp ID | satisfaction\_ level | last\_ evaluation | number\_ project | average\_ montly\_ hours | time\_ spend\_ company | Work\_ accident | promotion\_ last\_ 5years | dept | salary |
| 1 | 0.38 | 0.53 | 2 | 157 | 3 | 0 | 0 | sales | low |
| 2 | 0.8 | 0.86 | 5 | 262 | 6 | 0 | 0 | sales | medium |
| 3 | 0.11 | 0.88 | 7 | 272 | 4 | 0 | 0 | sales | medium |
| 4 | 0.72 | 0.87 | 5 | 223 | 5 | 0 | 0 | sales | low |

**OUTPUT OF THE PROJECT:**

1. CREATE A MS-PRESENTATION (MAXIMUM 12 SLIDES) EXPLAINING THE REASONS EMPLOYEE ARE PRONE TO LEAVE AFTER ANALYSING THIS DATA SET.
2. EXPLAIN WHAT TYPE OF EMPLOYEE ARE PRONE TO LEAVE THE COMPANY.
3. PREDICT THE FUTURE EMPLOYEE WHO WOULD TEND TO LEAVE THE COMPANY.