## **Part 1: SQL Exercise**

Table **Employee** - It contains the employee names, Status, the unique employee ids and the department names of a company

|  |  |  |  |
| --- | --- | --- | --- |
| **Department** | **EmpId** | **EmpName** | **EmpStatus** |
| IT | 1 | Will Smith | FTE |
| IT | 2 | Joe Hayden | Contractor |
| HR | 3 | John Packard | Contractor |
| IT | 4 | Robert Hagedorn | FTE |
| Sales | 5 | Robb Doe | FTE |
| Sales | 6 | Chris Bob | FTE |

Table **Salary** - The salaries for each employee per financial year. The table has the history of the last 5 Financial Year.

|  |  |  |
| --- | --- | --- |
| **EmpId** | **Salary** | **FinancialYear** |
| 1 | 500 | 2020 |
| 2 | 600 | 2020 |
| 3 | 1000 | 2020 |
| 4 | 400 | 2020 |
| 5 | 1200 | 2020 |
| 1 | 600 | 2021 |
| 2 | 750 | 2021 |
| 3 | 1100 | 2021 |

|  |  |  |
| --- | --- | --- |
| 4 | 800 | 2021 |
| 5 | 900 | 2021 |
| 6 | 1200 | 2021 |

Please answer **ALL** questions below. List any assumptions you have made.

**Part 1: SQL (5 Coding Questions, time limit 15 minutes)**:

Based on the above data tables, write a query to:

1. Print all departments where the average salary per employee is lower than 400

1. Print Employee names drawing lowest salary per department in current financial year
2. Find count of Full time employees (FTEs) per department who got more than 10% hike in current financial year

## **Part 2: Python Exercise**

1. **Write a Python Program to Count the Number of Vowels in a String?**

**Example :**

If the input String is “**Hello World”**

Output should be **3**