### Problem Statement:

A rapidly growing mid-sized IT consulting firm with over 500 employees is planning to revamp its HR analytics framework to make data-driven decisions for talent management, succession planning, and performance evaluation. The leadership team has observed increasing attrition rates in key technical departments and inconsistent performance reviews across managers. They want the HR department to analyze employee tenure, performance progression, department-wise salary distribution, and promotion-readiness based on performance review history.

HR wants insights into who their top-performing employees are, which departments are at risk of talent loss due to low recognition or salary disparity, and how frequently performance reviews are being conducted. The review process includes numeric scores assigned every six months by team leads and is stored in a centralized MySQL database. Trino is used as the query engine for reporting purposes.

The HR team needs a dashboard that surfaces insights like tenure-based retention buckets, average performance score by department, and list of employees eligible for promotion. Additionally, the system should highlight employees overdue for reviews or who have shown performance improvement or decline over time.

### Sample Dataset

Table: employees

Columns: employee\\_id, first\\_name, last\\_name, department, join\\_date, salary

Table: performance\\_reviews

Columns: review\\_id, employee\\_id, review\\_date, score

| employee\\_id | first\\_name | last\\_name | department | join\\_date | salary |

| ------------ | ----------- | ---------- | ----------- | ---------- | ------ |

| 1 | Alice | Rao | Engineering | 2020-03-15 | 90000 |

| 2 | Bob | Mehta | Sales | 2019-06-01 | 70000 |

| 3 | Carol | Singh | Engineering | 2021-11-20 | 95000 |

| 4 | David | Kumar | HR | 2022-01-10 | 65000 |

| review\\_id | employee\\_id | review\\_date | score |

| ---------- | ------------ | ------------ | ----- |

| 101 | 1 | 2024-03-01 | 4.6 |

| 102 | 2 | 2024-03-10 | 4.2 |

| 103 | 3 | 2024-03-15 | 4.9 |

| 104 | 4 | 2024-03-20 | 3.8 |

| 105 | 1 | 2023-09-01 | 4.3 |

### Scenario-Based SQL Questions

1. Identify employees who have completed more than three years of tenure in the company.

2. Compute the average and highest salary for each department.

3. Find the average performance score per department, and rank them from best to worst.

4. List employees whose last review was more than six months ago.

5. Determine which employees are eligible for promotion if the average of their last two review scores is above 4.5.

6. Generate a department-wise report of employees ranked by their most recent performance review score.