**HR & Employee Management System**

**Table structures**

1. **Employees**

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| emp\_id | INT (PK) | Employee ID |
| name | VARCHAR | Full Name |
| dept\_id | INT (FK) | Department ID |
| joining\_date | DATE | Date of Joining |
| leaving\_date | DATE (NULL) | Date of Exit (nullable) |
| status | VARCHAR | 'Active', 'Resigned' |

1. **Departments**

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| dept\_id | INT (PK) | Department ID |
| dept\_name | VARCHAR | Name of Department |

1. **Salaries**

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| salary\_id | INT (PK) | Salary Record ID |
| emp\_id | INT (FK) | Employee ID |
| amount | DECIMAL | Monthly Salary |
| pay\_date | DATE | Date of Payment |

1. **Attendance**

|  |  |  |
| --- | --- | --- |
| Column | Type | Description |
| att\_id | INT (PK) | Attendance ID |
| emp\_id | INT (FK) | Employee ID |
| att\_date | DATE | Date of Attendance |
| status | VARCHAR | 'Present', 'Absent' |

**Sample Data (Minimal)**

1. **Employees:**

INSERT INTO employees VALUES

(1, 'Amit', 101, '2021-01-10', NULL, 'Active'),

(2, 'Ravi', 102, '2020-03-15', '2023-05-10', 'Resigned'),

(3, 'Neha', 101, '2022-07-01', NULL, 'Active'),

(4, 'Sara', 103, '2019-11-20', NULL, 'Active');

1. **Departments:**

INSERT INTO departments VALUES

(101, 'HR'),

(102, 'Finance'),

(103, 'IT');

1. **Salaries:**

INSERT INTO salaries VALUES

(1, 1, 45000, '2025-07-01'),

(2, 2, 50000, '2023-04-01'),

(3, 3, 40000, '2025-07-01'),

(4, 4, 60000, '2025-07-01');

1. **Attendance:**

INSERT INTO attendance VALUES

(1, 1, '2025-07-01', 'Present'),

(2, 1, '2025-07-02', 'Absent'),

(3, 3, '2025-07-01', 'Present'),

(4, 4, '2025-07-01', 'Absent');

**Tasks**

### ****A. Identify Underperforming Departments****

(Based on average attendance rate)

### ****B. Track Employee Turnover****

(Turnover rate = Resigned Employees / Total Employees)

### ****C. Analyze Salary Trends****

(Average salary per department over time)