**SQL PORTFOLIO PROJECT**

**TESTING EXCEL REPORT IN MYSQL**

***Employee Count:***

```
SELECT SUM(employee_count) as Employee_Count
FROM hrdata;
```

| Employee_Count |
|---|
| 1470 |

***Attrition Count:***

```
SELECT COUNT(attrition)
FROM hrdata
WHERE attrition = 'Yes';
```

| COUNT(attrition) |
|---|
| 237 |

***Attrition Rate:***

```
SELECT
ROUND(((SELECT COUNT(attrition) FROM hrdata WHERE attrition =
'Yes')/SUM(employee_count)) * 100, 2) AS Attrition_Rate
FROM hrdata;
```

| Attrition_Rate |
|---|
| 16.12 |

***Active Employees:***

```
SELECT SUM(employee_count) - (SELECT COUNT(attrition) FROM hrdata WHERE attrition
= 'Yes') AS Active_Employees
FROM hrdata;
```

| Active_Employees |
|---|
| 1233 |

***Average Age:***

| Avg_age |
|---|
| 37 |

***Attrition by Gender:***

```
SELECT gender, COUNT(attrition) AS Attrition_Count
FROM hrdata
WHERE attrition='Yes'
GROUP BY gender
ORDER BY COUNT(attrition) DESC;
```

| gender | Attrition_Count |
|---|---|
| Male | 150 |
| Female | 87 |

***Department Wise Attrition:***

```
SELECT department,
COUNT(attrition) AS attrition_count, ROUND((COUNT(attrition) * 100.0) / (SELECT COUNT(*) FROM hrdata WHERE attrition = 'Yes'), 2) AS pct
FROM hrdata
WHERE attrition = 'Yes'
GROUP BY department
ORDER BY COUNT(attrition) DESC;
```

| department | attrition_count | pct |
|---|---|---|
| R&D | 133 | 56.12 |
| Sales | 92 | 38.82 |
| HR | 12 | 5.06 |

***No of Employees by Age Group:***

```
SELECT AGE, SUM(employee_count) AS employee_count
FROM hrdata
GROUP BY age
ORDER BY age;
```

| AGE | employee_count |
|---|---|
| 18 | 8 |
| 19 | 9 |
| 20 | 11 |
| 21 | 13 |
| 22 | 16 |
| 23 | 14 |
| 24 | 26 |
| 25 | 26 |
| 26 | 39 |
| 27 | 48 |
| 28 | 48 |
| 29 | 68 |
| 30 | 60 |
| 31 | 69 |
| 32 | 61 |

***Education Field Wise Attrition:***

```
SELECT education_field, COUNT(attrition) AS attrition_count
FROM hrdata
WHERE attrition = 'Yes'
GROUP BY education_field
ORDER BY COUNT(attrition) DESC;
```

| | education_field | attrition_count |
|---|---|---|
| ▶ | Life Sciences | 89 |
| | Medical | 63 |
| | Marketing | 35 |
| | Technical Degree | 32 |
| | Other | 11 |
| | Human Resources | 7 |

***Attrition Rate by Gender for Different Age Groups:***

```
SELECT age_band,
gender,
COUNT(attrition) AS attrition, ROUND((COUNT(attrition) * 100.0) / (SELECT COUNT(*) FROM hrdata WHERE attrition = 'Yes'), 2) AS pct
FROM hrdata
WHERE attrition = 'Yes'
GROUP BY age_band, gender
ORDER BY age_band, gender DESC;
```

| age_band | gender | attrition | pct |
|---|---|---|---|
| 25 - 34 | Male | 69 | 29.11 |
| 25 - 34 | Female | 43 | 18.14 |
| 35 - 44 | Male | 37 | 15.61 |
| 35 - 44 | Female | 14 | 5.91 |
| 45 - 54 | Male | 16 | 6.75 |
| 45 - 54 | Female | 9 | 3.80 |
| Over 55 | Male | 8 | 3.38 |
| Over 55 | Female | 3 | 1.27 |
| Under 25 | Male | 20 | 8.44 |
| Under 25 | Female | 18 | 7.59 |

***Job Satisfaction Rating:***

```
SELECT
job_role,
SUM(CASE WHEN job_satisfaction = 1 THEN employee_count ELSE 0 END) AS one,
SUM(CASE WHEN job_satisfaction = 2 THEN employee_count ELSE 0 END) AS two,
SUM(CASE WHEN job_satisfaction = 3 THEN employee_count ELSE 0 END) AS three,
SUM(CASE WHEN job_satisfaction = 4 THEN employee_count ELSE 0 END) AS four
FROM hrdata
GROUP BY job_role
ORDER BY job_role;
```

| job_role | one | two | three | four |
|---|---|---|---|---|
| Healthcare Representative | 26 | 19 | 43 | 43 |
| Human Resources | 10 | 16 | 13 | 13 |
| Laboratory Technician | 56 | 48 | 75 | 80 |
| Manager | 21 | 21 | 27 | 33 |
| Manufacturing Director | 26 | 32 | 49 | 38 |
| Research Director | 15 | 16 | 27 | 22 |
| Research Scientist | 54 | 53 | 90 | 95 |
| Sales Executive | 69 | 54 | 91 | 112 |
| Sales Representative | 12 | 21 | 27 | 23 |