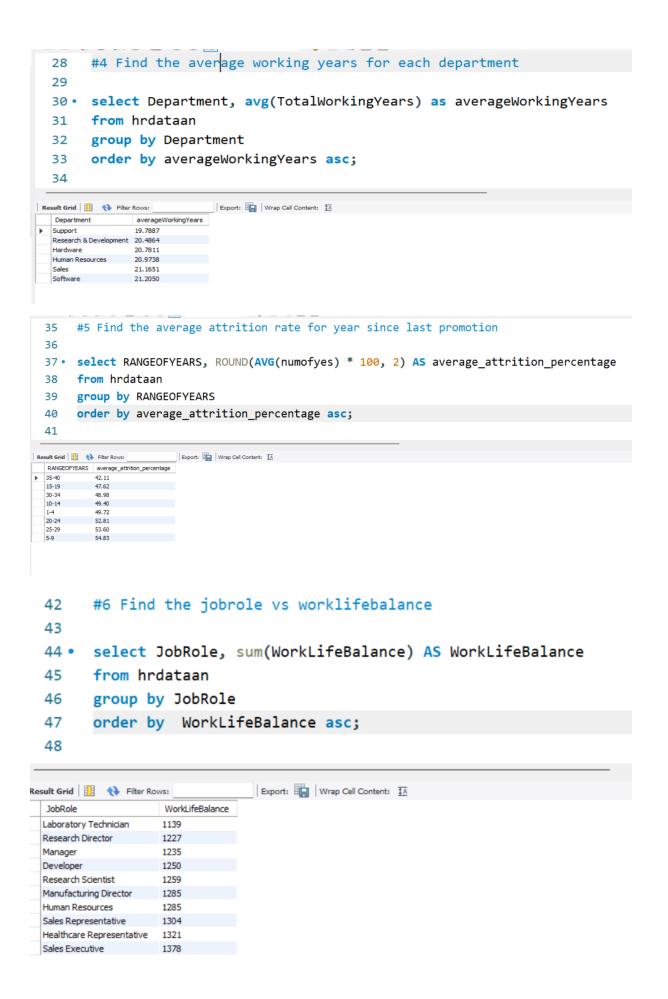
## **HR Analytics SQL Queries**

```
1 • create database hranalytics;
    2 • use hranalytics;
         select count(*) from hrdataan;
    4
    5 •
         select count(EmployeeNumber) from hrdataan;
    6
    7
         #1 Find the department wise average attrition rate
Export: Wrap Cell Content: IA
   count(*)
5043
   6
      #1 Find the department wise average attrition rate
   8
   9 • select Department, round(avg(numofyes) * 100, 2) as Average_attrition_percentage
  10
      from hrdataan
      group by department;
  11
  12
 Export: Wrap Cell Content: 🔣
 Department Average_attrition_percentage

Software 51.03
  Hardware 51.29
  Human Resources
         49.65
  Support
  Sales 50.83
Research & Development 51.48
 14
 15
       # 2 Find the average hourly rate of male research scientist
 16
       select JobRole, Gender , avg(hourlyrate) as average_hourly_rate from hrdataan
 17 ·
       where JobRole = "Research Scientist" and Gender = "Male"
 18
       group by JobRole;
 19
 20
                          Export: Wrap Cell Content: IA
Result Grid 🔠 🙌 Filter Rows:
 JobRole
        Gender average_hourly_rate
 Research Scientist Male 110.4509
```



```
49
        #7 Find the count of employee based on educational fields
 50
       select EducationField, sum(EmployeeCount) AS Totalemployee
 51 •
        from hrdataan
 52
        group by EducationField
 53
        order by Totalemployee asc;
 54
 55
Export: Wrap Cell Content: TA
                 WorkLifeBalance
 Laboratory Technician
                 1139
 Research Director 1227
 Manager
                 1235
 Developer
                 1250
 Research Scientist
                 1259
               1285
 Manufacturing Director
                 1285
 Human Resources
                1304
 Sales Representative
 Healthcare Representative 1321
 Sales Executive
                1378
           -- 9 Employee Count by Job Role and Gender
   61
           SELECT JobRole, Gender, COUNT(*) AS EmployeeCount
   63
           FROM hrdataan
           GROUP BY JobRole, Gender
           ORDER BY JobRole, Gender;
   65
   66
   67
                                     Export: Wrap Cell Content: IA
JobRole
                      Gender EmployeeCount
  Developer
                      Female
                             262
                     Male
                             254
   Developer
   Healthcare Representative Female
                             265
   Healthcare Representative Male
                             255
   Human Resources
                     Female
                             259
                     Male
   Human Resources
                             245
   Laboratory Technician
                     Female
                             253
   Laboratory Technician
                    Male
                             216
   Manager
                      Female
                             241
   Manager
                     Male
                             248
```

Manufacturing Director

Manufacturing Director

Result 9 ×

Female

Male

256

253

```
68
          -- 10 Top 5 Highest Paid Job Roles (Based on Monthly Income)
         SELECT JobRole, ROUND(AVG(MonthlyIncome), 2) AS AverageMonthlyIncome
          FROM hrdataan
  70
          GROUP BY JobRole
  71
  72
          ORDER BY AverageMonthlyIncome DESC
  73
          LIMIT 5;
  74
Result Grid H N Filter Rows:
                                     Export: Wrap Cell Content: IA
                     AverageMonthlyIncome
 Research Scientist
                     27105.65
 Manufacturing Director 26999.47
 Research Director
                     26549.76
 Healthcare Representative 26337.80
 Sales Executive
                     26332.20
 75
 76 -- 11 Attrition Rate by Education Field
 77 • SELECT EducationField,
 78
              CONCAT(ROUND(AVG(CASE WHEN Attrition = 'Yes' THEN 1 ELSE 0 END) * 100, 2), '%') AS AttritionRate
 79 FROM hrdataan
 80 GROUP BY EducationField;
 81
Export: Wrap Cell Content: IA
 EducationField AttritionRate
Medical 51.41%
 Medical

        Medical
        51.41%

        Life Sciences
        46.34%

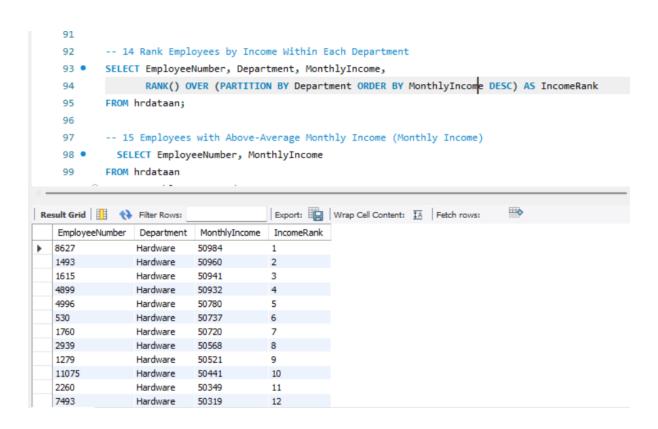
        Human Resources
        49.94%

        Technical Degree
        51.34%

 Marketing 51.10%
Other 49.77%
   81
          -- 12 Percentage of Employees with Overtime
   82
   83 • 

SELECT CONCAT(ROUND(SUM(CASE WHEN OverTime = 'Yes' THEN 1 ELSE 0 END)*100.0
       / COUNT(*), 2), '%') AS OvertimePercentage
   84
   85
          FROM hrdataan;
   86
Export: Wrap Cell Content: IA
  OvertimePercentage
49.77%
```

```
ŏь
  87
         -- 13 Employees with Above-Average Monthly Income
         SELECT EmployeeNumber, MonthlyIncome
         FROM hrdataan
  89
         WHERE MonthlyIncome > (SELECT AVG(MonthlyIncome) | FROM hrdataan);
  90
  91
  92
         -- 14 Rank Employees by Income Within Each Department
Export: Wrap Cell Content: A Fetch rows:
  EmployeeNumber MonthlyIncome
             42682
             41552
             45252
  3
             46149
             28555
             27150
  13
             34153
             47844
  14
  18
             47968
  23
             30597
  27
             31621
  37
             40937
hrdataan 13 🗴
```



```
97
        -- 15 Employees with Above-Average Monthly Income (Monthly Income)
  98 •
           SELECT EmployeeNumber, MonthlyIncome
  99
        FROM hrdataan
 100 

WHERE MonthlyIncome > (
              SELECT AVG(MonthlyIncome)
101
102
              FROM hrdataan);
103
Export: Wrap Cell Content: 🔀 | Fetch rows:
 EmployeeNumber MonthlyIncome
             42682
            41552
             45252
 3
             46149
             28555
            27150
  13
             34153
             47844
 14
  18
             47968
             30597
  23
  27
             31621
 37
             40937
   103
           -- 16 Average Monthly Income by Job Role and Gender
   104
   105 • SELECT JobRole, Gender, ROUND(AVG(MonthlyIncome), 2) AS AvgIncome
   106
           FROM hrdataan
   107
           GROUP BY JobRole, Gender;
   108
         -- 17 Percentage of Attrition by Job Role
   109
                               Export: Wrap Cell Content: TA
  JobRole
                    Gender AvgIncome

    Developer

                    Male
                         25262.14
    Research Director Female 26510.04
    Healthcare Representative Female
                         25829.57
    Sales Executive Female 25744.67
     Manufacturing Director
                   Female
                         27226.38
    Human Resources Male 25779.78
     Human Resources
                         24910.83
                   Female
           Male 25283.95
     Manager
    Developer
                   Female
                         26706.44
    Manager Female 25820.03
                   Female 25650.18
     Sales Representative
```

Sales Representative

Male

26039.02

```
108
   109
           -- 17 Percentage of Attrition by Job Role
   110 • SELECT JobRole,
                  CONCAT(ROUND(AVG(CASE WHEN Attrition = 'Yes' THEN 1 ELSE 0 END) * 100, 2), '%') AS AttritionRate
   111
   112
           FROM hrdataan
   113
           GROUP BY JobRole;
   114
   115
           -- 18 Departments with Above-Average Attrition Rate (Subquery)
   116 • SELECT Department
Result Grid 🎚 🙌 Filter Rows:
                                       Export: Wrap Cell Content: IA
   JobRole
                       AttritionRate
Developer
                       49.61%
  Research Director 49, 18%
  Healthcare Representative 52,50%
                    50.46%
  Sales Executive
  Manufacturing Director
                       47.15%
  Human Resources
                    52.58%
                       50.31%
  Sales Representative
                     49.22%
   Research Scientist
                       51.33%
  Laboratory Technician 47.33%
    127
   128
             -- 19 Top 3 Highest-Paid Employees per Department (CTE)
    129 ● ⊖ WITH RankedIncomes AS (
    130
                 SELECT EmployeeNumber, Department, MonthlyIncome,
                         DENSE_RANK() OVER (PARTITION BY Department ORDER BY MonthlyIncome DESC) AS rnk
    131
    132
                 FROM hrdataan
    133
             SELECT EmployeeNumber, Department, MonthlyIncome
    134
    135
             FROM RankedIncomes
             WHERE rnk <= 3;
    136
    137
Result Grid | III Filter Rows:
                                        Export: Wrap Cell Content: IA
    EmployeeNumber Department
                                        MonthlyIncome
   8627
                   Hardware
                                        50984
   1493
                   Hardware
                                       50960
    1615
                                        50941
   5479
                   Human Resources
                                       50971
    6487
                   Human Resources
                                        50891
   577
                   Human Resources
                                       50852
                   Research & Development 50869
    1603
   4870
                   Research & Development 50809
   8679
                   Research & Development 50799
                   Sales
   524
                                       50999
                   Sales
   7929
                                        50987
                   Sales
   201
                                        50986
Result 15 ×
```

