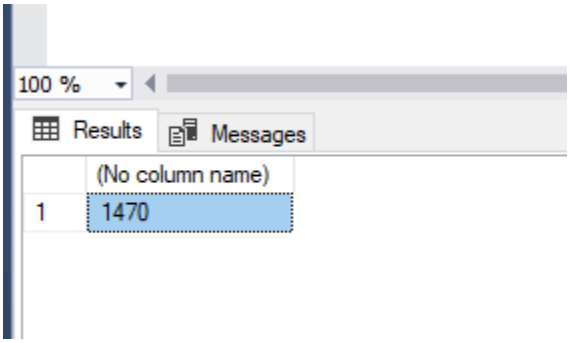
CS 457 - Homework Assignment 5: SQL

Fahad Ahmed

fs05847@st.habib.edu.pk

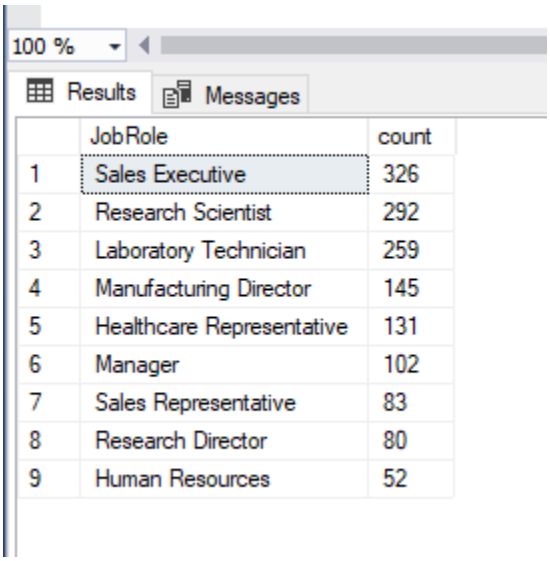
1.

```
select count (*) from employeeattrition1;
```



2.

```
select JobRole, count(*) as [count]  from employeeattrition1 group by JobRole order by [count] desc;
```



	JobRole	count
1	Sales Executive	326
2	Research Scientist	292
3	Laboratory Technician	259
4	Manufacturing Director	145
5	Healthcare Representative	131
6	Manager	102
7	Sales Representative	83
8	Research Director	80
9	Human Resources	52

3.

```
SELECT JobRole, avg(monthlyincome) as monthly_income, avg(percentsalaryhike) as salary_hike
FROM employeeattrition1 GROUP BY JobRole ORDER BY count(JobRole) ASC;
```

Results Messages

	JobRole	monthly_income	salary_hike
1	Human Resources	4235	14
2	Research Director	16033	14
3	Sales Representative	2626	15
4	Manager	17181	15
5	Healthcare Representative	7528	15
6	Manufacturing Director	7295	15
7	Laboratory Technician	3237	15
8	Research Scientist	3239	15
9	Sales Executive	6924	14

4.

```
SELECT Gender, MaritalStatus,AVG(JobSatisfaction) as avg_jobsatisfic FROM
employeeattrition1 group by Gender, MaritalStatus;
```

Results Messages

	Gender	MaritalStatus	avg_jobsatisfic
1	Male	Divorced	2
2	Male	Single	2
3	Female	Married	2
4	Male	Married	2
5	Female	Divorced	2
6	Female	Single	2

5.

```
select JobRole,max(age) as max_age,min(age) as min_age, max(HourlyRate) as
max_HourlyRate,min(HourlyRate) as min_HourlyRate
from employeeattrition1 group by JobRole;
```

Results | Messages

	JobRole	max_age	min_age	max_HourlyRate	min_HourlyRate
1	Sales Executive	60	24	100	30
2	Sales Representative	53	18	100	30
3	Research Scientist	59	18	100	30
4	Human Resources	59	19	100	31
5	Healthcare Representative	60	24	100	30
6	Research Director	58	27	99	30
7	Manager	60	30	99	30
8	Manufacturing Director	59	22	100	30
9	Laboratory Technician	59	18	100	30

6.

```
select top(20) e1.EmployeeNumber, e1.Age, e1.Gender, e1.JobRole, e2.OverTime, e2.Attrition
from employeeattrition1 e1, employeeattrition2 e2 where e1.EmployeeNumber =
e2.EmployeeNumber;
```

Results | Messages | Client Statistics

	EmployeeNumber	Age	Gender	JobRole	OverTime	Attrition
1	1	41	Female	Sales Executive	Yes	Yes
2	2	49	Male	Research Scientist	No	No
3	4	37	Male	Laboratory Technician	Yes	Yes
4	5	33	Female	Research Scientist	Yes	No
5	7	27	Male	Laboratory Technician	No	No
6	8	32	Male	Laboratory Technician	No	No
7	10	59	Female	Laboratory Technician	Yes	No
8	11	30	Male	Laboratory Technician	No	No
9	12	38	Male	Manufacturing Director	No	No
10	13	36	Male	Healthcare Representative	No	No
11	14	35	Male	Laboratory Technician	No	No
12	15	29	Female	Laboratory Technician	Yes	No
13	16	31	Male	Research Scientist	No	No
14	18	34	Male	Laboratory Technician	No	No
15	19	28	Male	Laboratory Technician	Yes	Yes
16	20	29	Female	Manufacturing Director	No	No
17	21	32	Male	Research Scientist	Yes	No
18	22	22	Male	Laboratory Technician	Yes	No
19	23	53	Female	Manager	No	No
20	24	38	Male	Research Scientist	Yes	No