Project – 1

```
-- This is the Project Analysis for my internship with PSYLIQ
-- By UMANG PARTI
--.............................................................
--Viewing the data
select * from data;
select * from employee_survey_data;
select * from manager_survey_data;
select * from in_time;
select * from out_time;
```



```
--.............................................................
--1. Retrieve the total number of employees in the dataset.
select count(distinct EmpName) as total_employees
from data;
```



```
--2. List all unique job roles in the dataset.
select distinct JobRole as unique_job_role
from data;
```
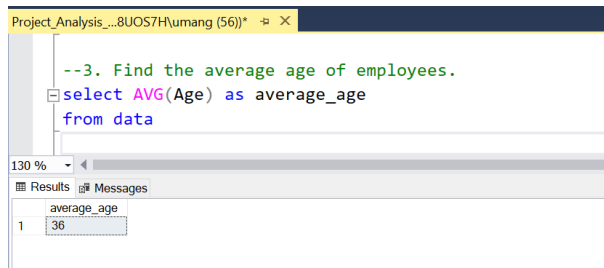
```sql
--3. Find the average age of employees.
select AVG(Age) as average_age
from data
```

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select AVG(Age) as average_age
from data

130 %

Results | Messages

	average_age
1	36

```sql
--4. Retrieve the names and ages of employees who have worked at the company for more
--than 5 years.
select EmpName as Employee_Name, Age as Employee_Age
from data
where YearsAtCompany >5
```

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--than 5 years.
select EmpName as Employee_Name, Age as Employee_Age
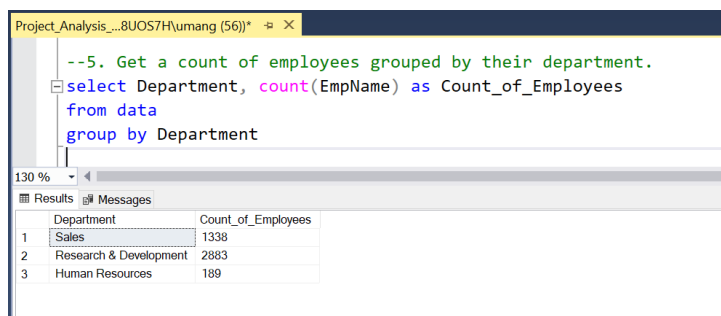from data
where YearsAtCompany >5

130 %

Results | Messages

	Employee_Name	Employee_Age
1	RENEE MARQUARDT	38
2	HARVEY ELWIN	32
3	LEON WHITE	46
4	NATHAN HARDY	31
5	SUSAN BUCHBINDER	25
6	KIRSTEN BARASH	45
7	DENNIS SUTTER	36
8	JOHN BROWN	55
9	KATHRYN BALLOU	47
10	GRAD GREEN	35
11	DARCY KELLER	38
12	SAMUEL ROMERO	26
13	ALEXANDER CHEN	50
14	BURK DELVENTHAL	42
15	THOMAS HARVEY	29
16	MARTIN BELTRAN	55
17	ROBERT TAI	37

Query executed successfully.   DESKTOP-Q8UOS7H\SQLEXPRESS ...   DESKTOP-Q8UOS7H\umang ...   psyliq   00:00:00   2,082 rows

```sql
--5. Get a count of employees grouped by their department.
select Department, count(EmpName) as Count_of_Employees
from data
group by Department
```

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select Department, count(EmpName) as Count_of_Employees
from data
group by Department

130 %

Results | Messages

	Department	Count_of_Employees
1	Sales	1338
2	Research & Development	2883
3	Human Resources	189

```sql
--6. List employees who have 'High' Job Satisfaction.
select EmpName, JobSatisfaction
from data d
inner join employee_survey_data e on d.EmployeeID = e.EmployeeID
where JobSatisfaction = 4
```



```sql
--7. Find the highest Monthly Income in the dataset.
select max(MonthlyIncome) as max_monthly_income
from data
```



```sql
--8. List employees who have 'Travel_Rarely' as their BusinessTravel type.
select EmpName
from data
where BusinessTravel = 'Travel_Rarely'
```

```
--9. Retrieve the distinct MaritalStatus categories in the dataset.
select distinct MaritalStatus as unique_marital_status
from data;
```

	unique_marital_status
1	Single
2	Divorced
3	Married

```
--10. Get a list of employees with more than 2 years of work experience
--but less than 4 years in their current role.
select EmpName, TotalWorkingYears, YearsSinceLastPromotion
from data
where TotalWorkingYears >2 and YearsSinceLastPromotion <4
```

	EmpName	TotalWorkingYears	YearsSinceLastPromotion
1	LAWRENCE LEE	6	1
2	DWAYNE CURRY	5	0
3	HARVEY ELWIN	9	0
4	DENNIS HERRERA	5	0
5	DONALD BRYANT	10	0
6	SUSAN BUCHBINDER	6	1
7	DONALD FIELDS	5	0
8	LUIS HERRERA	7	0
9	GEORGE FOURAS	3	1
10	MARTIN LALOR JR	15	0
11	SAMUEL ROMERO	6	1
12	ALEXANDER CHEN	28	1
13	OLLIE BANKS	21	1
14	THOMAS HARVEY	10	0
15	MARTIN BELTRAN	12	0
16	LORI BORGHI	5	3
17	CHRISTOPHER HAZEN	19	0

Query executed successfully.   DESKTOP-Q8UOS7H\SQLEXPRESS ...   DESKTOP-Q8UOS7H\umang ...   psyliq   00:00:00   3,071 rows

```
--11. List employees who have changed their job roles within the company
--(JobLevel and JobRole differ from their previous job).
-- (there is no data to tell us about the information on their
--previous joblebel and previous job roles)


--12. Find the average distance from home for employees in each department.
Select Department, Avg(DistanceFromHome) as Avg_distance_from_home
from data
group by Department
```

	Department	Avg_distance_from_home
1	Sales	9.230941
2	Research & Development	9.236212
3	Human Resources	8.253968

```
--13. Retrieve the top 5 employees with the highest MonthlyIncome.
Select top 5 EmpName, MonthlyIncome
from data
order by MonthlyIncome desc
```

	EmpName	MonthlyIncome
1	KEVIN LABANOWSKI	199990
2	DAVID KUCIA	199990
3	LAWRENCE LAU	199990
4	KEVIN MCNAUGHTON	199730
5	NATHAN SZUTU	199730

```
--14. Calculate the percentage of employees who have had a promotion in the last year.
select
(select count(EmpName)
from data
where YearsSinceLastPromotion <=1)*100 /count (*) as percentage
from data
```

	percentage
1	63

```
--15. List the employees with the highest and lowest EnvironmentSatisfaction.
select EmpName, EnvironmentSatisfaction
from data d
inner join employee_survey_data e on d.EmployeeID = e.EmployeeID
where EnvironmentSatisfaction = 1 or EnvironmentSatisfaction = 4
```

	EmpName	EnvironmentSatisfaction
1	RENEE MARQUARDT	4
2	HARVEY ELWIN	4
3	DENNIS HERRERA	1
4	DONALD BRYANT	1
5	JOHN BROWN	4
6	KATHRYN BALLOU	1
7	DONALD FIELDS	4
8	GEORGE FOURAS	4
9	MARTIN LALOR JR	1
10	DARCY KELLER	1
11	ALEXANDER CHEN	1
12	LORI BORGHI	1
13	ROBERT TAI	4
14	CHRISTOPHER HAZEN	4
15	PIERRE FRANCOIS	4
16	ROSELYN JEQUINTO	1
17	TROY JOLLIFF	4

Query executed successfully.   DESKTOP-Q8UOS7H\SQLEXPRESS ...   DESKTOP-Q8UOS7H\umang ...   psyliq   00:00:00   2,179 rows

```sql
--16. Find the employees who have the same JobRole and MaritalStatus.
select * from data
where JobRole = MaritalStatus
```
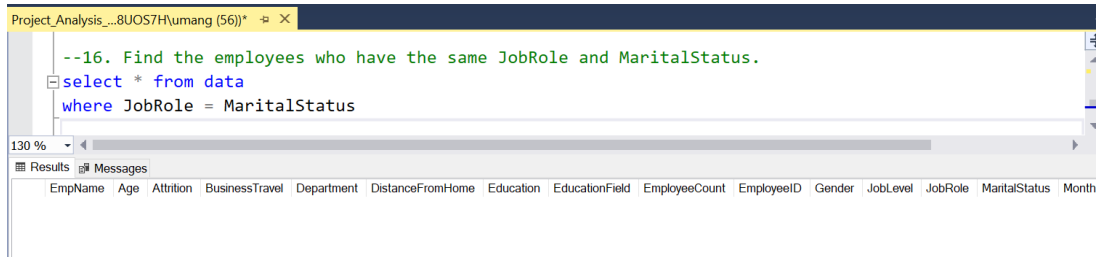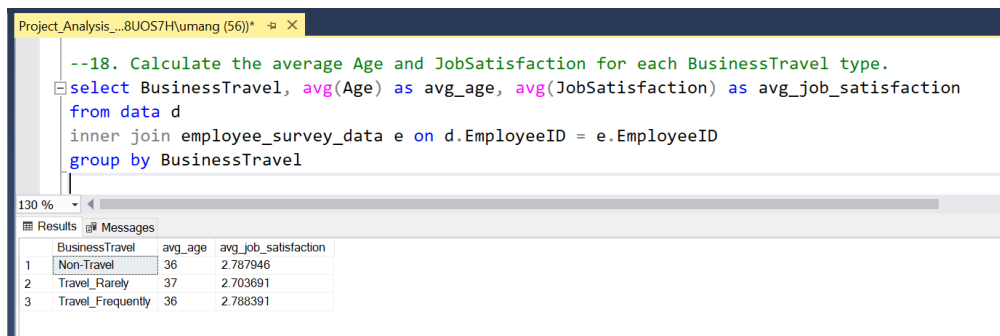
```sql
--17. List the employees with the highest TotalWorkingYears who also have a
--PerformanceRating of 4.
with A as (select EmpName, TotalWorkingYears, PerformanceRating,
rank() over(order by TotalWorkingYears desc) as rn
from data d
inner join manager_survey_data m on d.EmployeeID = m.EmployeeID
where PerformanceRating = 4)
select *
from A
where rn = 1
```
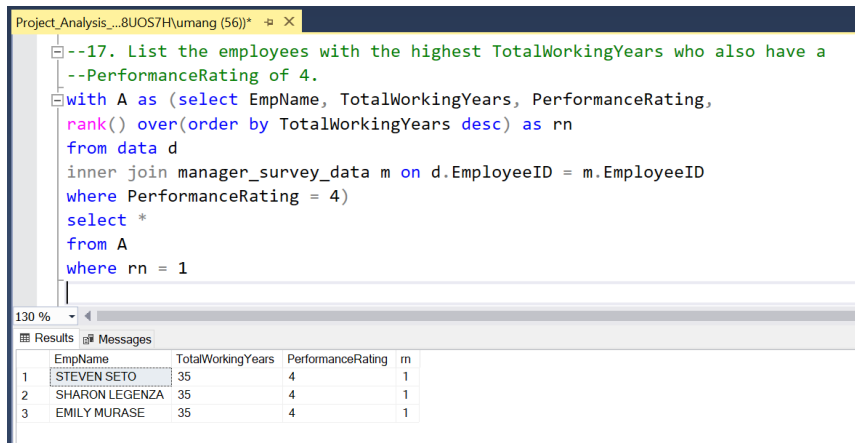
```sql
--18. Calculate the average Age and JobSatisfaction for each BusinessTravel type.
select BusinessTravel, avg(Age) as avg_age, avg(JobSatisfaction) as avg_job_satisfaction
from data d
inner join employee_survey_data e on d.EmployeeID = e.EmployeeID
group by BusinessTravel
```

```sql
--..............................................................................
```