

Shobhit Tulshain

1. Table for Question 1, 2, 3, 4, 7, 8, 9, 10

The screenshot shows the PostgreSQL Query Editor interface. On the left, the 'Schemas (3)' tree is expanded to 'asses', and the 'Tables (1)' tree is expanded to 'employee'. The 'Query Editor' tab is active, displaying the following SQL code:

```
12
13 set search_path to asses;
14 create table Employee(EmpId int primary key not null,
15                      FullName text not null,
16                      managerId int,
17                      projectId text,
18                      salary int);
19
20 select * from employee;
```

The 'Data Output' tab is selected, showing the following table:

	empid [PK] integer	fullname text	managerid integer	projectid text	salary integer
1	1	Ram	101	P1	12000
2	2	Suresh	102	P2	9000
3	3	Shobhit	101	P3	14000
4	4	Surya	103	P1	16000
5	5	Nitin	101	P1	11000

Query 1 answer

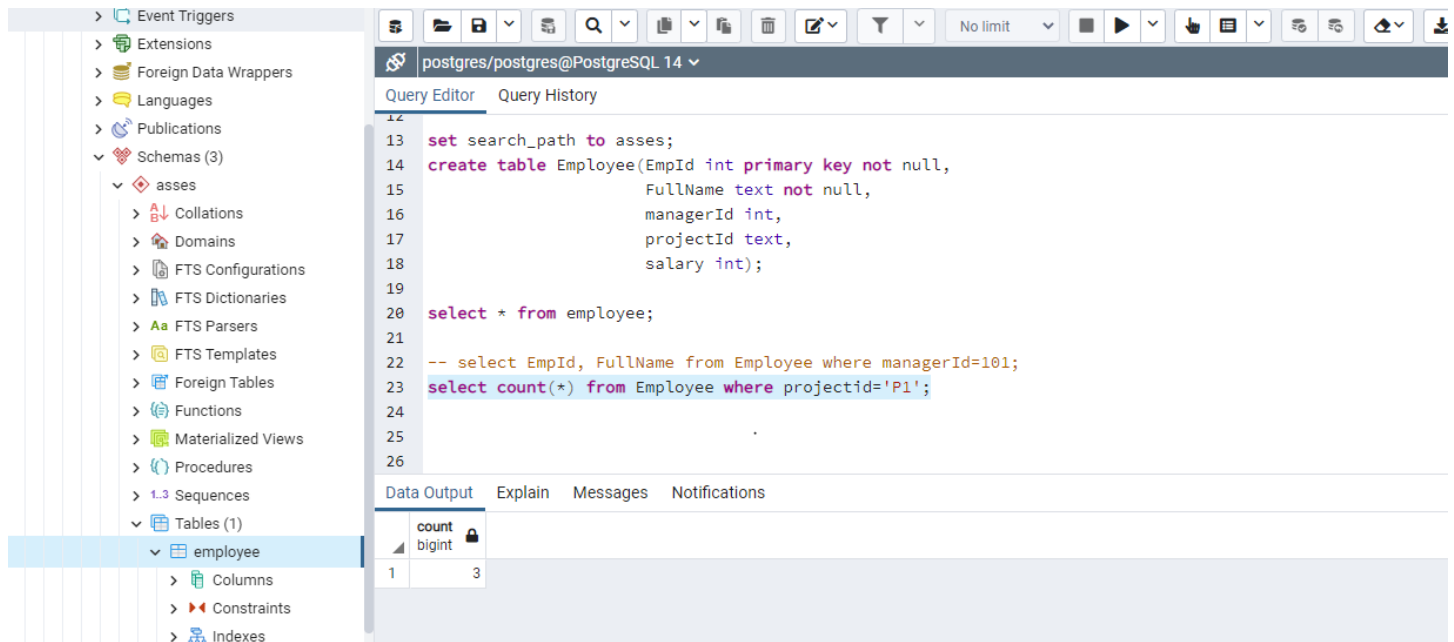
The screenshot shows the PostgreSQL Query Editor interface. On the left, the 'Schemas (3)' tree is expanded to 'asses', and the 'Tables (1)' tree is expanded to 'employee'. The 'Query Editor' tab is active, displaying the following SQL code:

```
12
13 set search_path to asses;
14 create table Employee(EmpId int primary key not null,
15                      FullName text not null,
16                      managerId int,
17                      projectId text,
18                      salary int);
19
20 select * from employee;
21
22 select EmpId, FullName from Employee where managerId=101;
```

The 'Data Output' tab is selected, showing the following table:

	empid [PK] integer	fullname text
1	1	Ram
2	3	Shobhit
3	5	Nitin

Query 2 answer



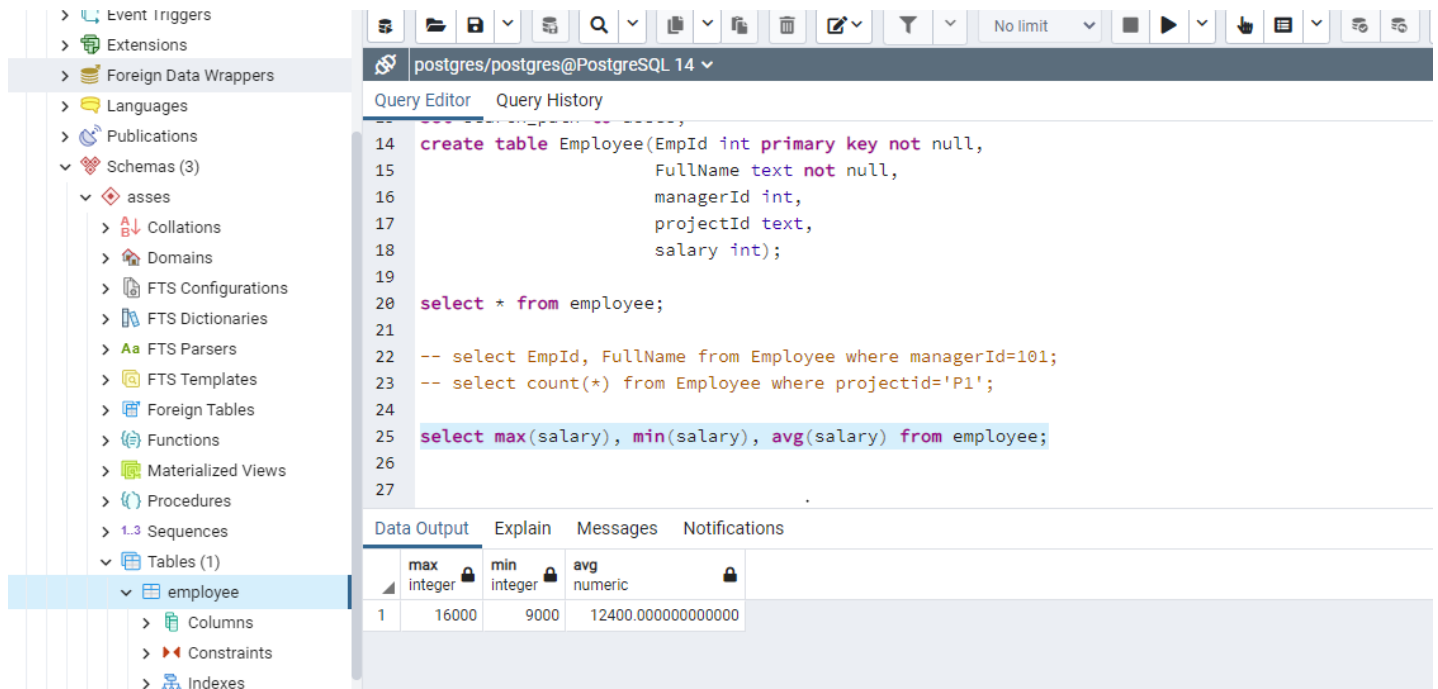
Query Editor Query History

```
12
13 set search_path to asses;
14 create table Employee(EmpId int primary key not null,
15                       FullName text not null,
16                       managerId int,
17                       projectId text,
18                       salary int);
19
20 select * from employee;
21
22 -- select EmpId, FullName from Employee where managerId=101;
23 select count(*) from Employee where projectId='P1';
24
25
26
```

Data Output Explain Messages Notifications

	count	bigint
1	3	

Query 3 answer



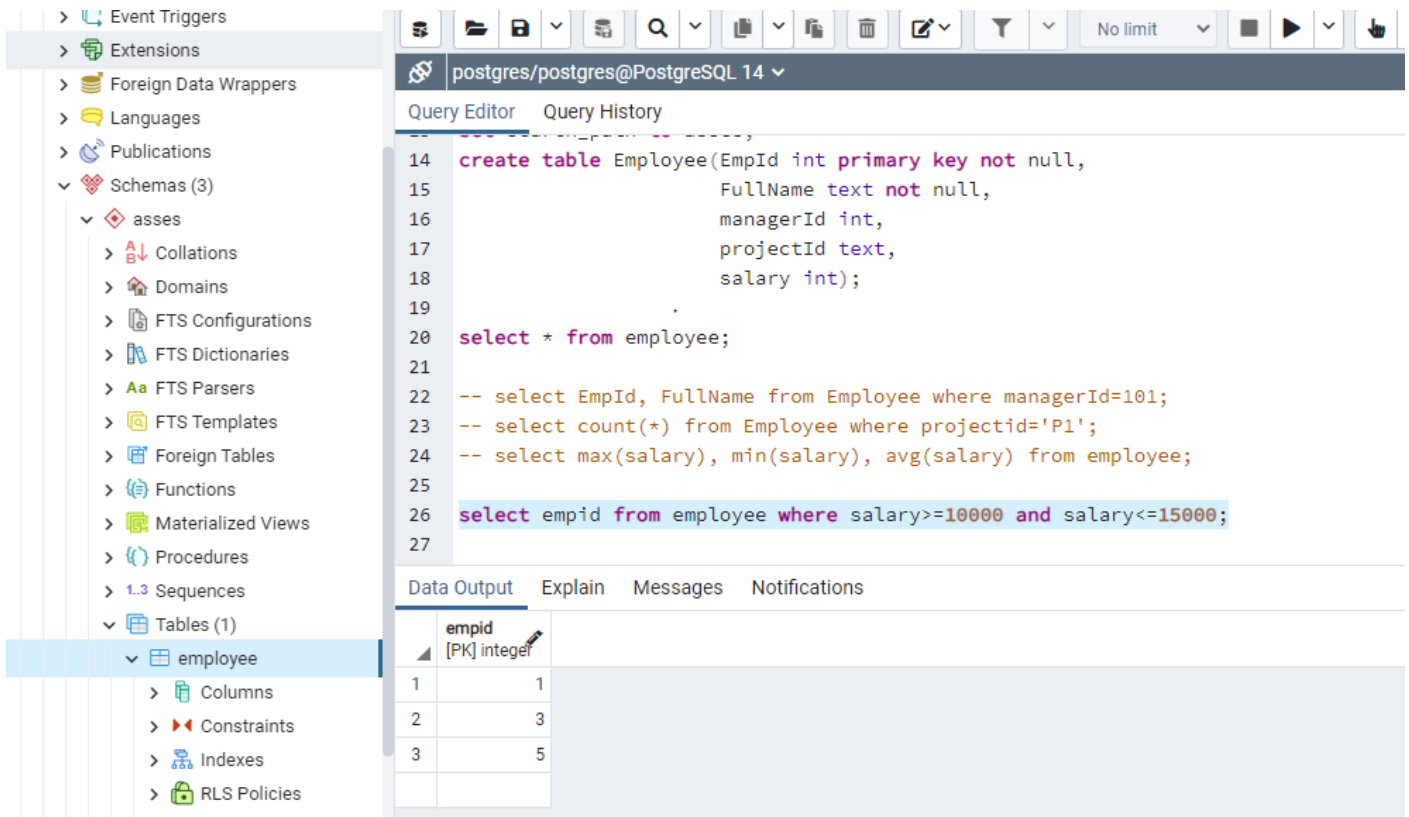
Query Editor Query History

```
14 create table Employee(EmpId int primary key not null,
15                       FullName text not null,
16                       managerId int,
17                       projectId text,
18                       salary int);
19
20 select * from employee;
21
22 -- select EmpId, FullName from Employee where managerId=101;
23 -- select count(*) from Employee where projectId='P1';
24
25 select max(salary), min(salary), avg(salary) from employee;
26
27
```

Data Output Explain Messages Notifications

	max integer	min integer	avg numeric
1	16000	9000	12400.000000000000

Query 4 answer



The screenshot shows the PostgreSQL Query Editor interface. The left sidebar displays the database schema, including Schemas (3), Tables (1), and Columns. The main editor area shows the following SQL code:

```
14 create table Employee(EmpId int primary key not null,  
15                        FullName text not null,  
16                        managerId int,  
17                        projectId text,  
18                        salary int);  
19  
20 select * from employee;  
21  
22 -- select EmpId, FullName from Employee where managerId=101;  
23 -- select count(*) from Employee where projectId='P1';  
24 -- select max(salary), min(salary), avg(salary) from employee;  
25  
26 select empid from employee where salary>=10000 and salary<=15000;  
27
```

The 'Data Output' tab shows the result of the query:

empid	[PK] integer
1	1
2	3
3	5

Query 5 Table

```
20 select * from employee;  
21  
22 -- select EmpId, FullName from Employee where managerId=101;  
23 -- select count(*) from Employee where projectId='P1';  
24 -- select max(salary), min(salary), avg(salary) from employee;  
25 -- select empid from employee where salary>=10000 and salary<=15000;  
26
```

Data Output Explain Messages Notifications

empid	fullname	managerid	projectid	salary	variable
[PK] integer	text	integer	text	integer	integer
1	1 Ram	101	P1	12000	1000
2	2 Suresh	102	P2	9000	700
3	3 Shobhit	101	P3	14000	1500
4	4 Surya	103	P1	16000	1600
5	5 Nitin	101	P1	11000	900

Query 5 answer

```
19
20 select * from employee;
21
22 -- select EmpId, FullName from Employee where managerId=101;
23 -- select count(*) from Employee where projectId='P1';
24 -- select max(salary), min(salary), avg(salary) from employee;
25 -- select empid from employee where salary>=10000 and salary<=15000;
26
27 select salary + variable as total_salary from employee;
```

Data Output Explain Messages Notifications

	total_salary integer
1	13000
2	9700
3	15500
4	17600
5	11900

Query 6 Table

EmployeeDetails

	empid [PK] integer	ename text
1	101	Shobhit
2	102	Ram
3	103	Nitin

employeesalary

	empid [PK] integer	salary integer
1	101	10000
2	103	8000

Query 6 answer

```
28 select empid from employeeDetails where empid in (select empid from employeesalary);
29
```

Data Output Explain Messages Notifications

	empid [PK] integer
1	101
2	103

Query 7 answer

```
29 select upper(fullname), lower(projectid) from employee;
```

Data Output Explain Messages Notifications

	upper text	lower text	
1	RAM	p1	
2	SURESH	p2	
3	SHOBHIT	p3	
4	SURYA	p1	
5	NITIN	p1	

Query 8 answer

```
30 select projectid, count(empid) as emp_count from employee group by projectid order by emp_count desc;
```

Data Output Explain Messages Notifications

	projectid text	emp_count bigint	
1	P1	3	
2	P2	1	
3	P3	1	

Query 9 answer

```
31 select * from employee where empid%2!=0;
```


Data Output Explain Messages Notifications

	empid [PK] integer	fullname text	managerid integer	projectid text	salary integer	variable. integer	
1	1	Ram	101	P1	12000	1000	
2	3	Shobhit	101	P3	14000	1500	
3	5	Nitin	101	P1	11000	900	

Query 10 answer

```
32 select max(salary) from employee where salary < (select max(salary)
33 from employee where salary not in(select max(salary) from employee));
```

Data Output Explain Messages Notifications

	max integer 	
1	12000	