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Submission: SQL Practical

EmployeeInfo Table:

Query   Query History

```
1  insert into EmployeeInfo(EmpFname, EmpLname, Department, Project, Address, DOB, Gender)
2  values
3      ('Sanjay','Mehra','HR','P1','Hyderabad(HYD)','01/12/1976','M'),
4      ('Ananya','Mishra','Admin','P2','Delhi(DEL)','02/05/1968','F'),
5      ('Rohan','Diwan','Account','P3','Mumbai(BOM)','01/12/1980','M'),
6      ('Sonia','Kulkarni','HR','P1','Hyderabad(HYD)','02/05/1992','F'),
7      ('Ankit','Kapoor','Admin','P2','Delhi(DEL)','03/07/1994','M');
8
9  select * from EmployeeInfo;
10
```

Data Output   Messages   Notifications

	empid [PK] integer	empfname character varying (256)	emplname character varying (256)	department character varying (256)	project character (2)	address text	dob date	gender character (1)
1	1	Sanjay	Mehra	HR	P1	Hyderabad(HYD)	1976-12-01	M
2	2	Ananya	Mishra	Admin	P2	Delhi(DEL)	1968-05-02	F
3	3	Rohan	Diwan	Account	P3	Mumbai(BOM)	1980-12-01	M
4	4	Sonia	Kulkarni	HR	P1	Hyderabad(HYD)	1992-05-02	F
5	5	Ankit	Kapoor	Admin	P2	Delhi(DEL)	1994-07-03	M

EmployeePosition Table:

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Query | Query History

```sql
1  create table if not exists EmployeePosition (
2      EmpID serial primary key,
3      EmpPosition varchar(256) not null,
4      DateOfJoining date not null,
5      Salary integer not null
6  );
7
```

Data Output   Messages   Notifications

```
NOTICE:  relation "employeeposition" already exists, skipping
CREATE TABLE

Query returned successfully in 58 msec.
```

```
1  insert into EmployeePosition
2      (EmpPosition,DateOfJoining,Salary)
3  values
4      ('Manager','01/05/2022','500000'),
5      ('Executive','02/05/2022','75000'),
6      ('Manager','01/05/2022','90000'),
7      ('Lead','02/05/2022','85000'),
8      ('Executive','01/05/2022','300000');
9
10  select * from EmployeePosition;
```

Query   Query History

Data Output   Messages   Notifications

empid [PK] integer	empposition character varying (256)	dateofjoining date	salary integer
1	Manager	2022-05-01	500000
2	Executive	2022-05-02	75000
3	Manager	2022-05-01	90000
4	Lead	2022-05-02	85000
5	Executive	2022-05-01	300000

1. Write a query to fetch the number of employees working in the department 'Admin'

Query   Query History

```
1  select count(EmpID) Empcount from EmployeeInfo where Department = 'Admin';
```

Data Output   Messages   Notifications

	empcount bigint
1	2

2. Write a query to retrieve the first four characters of EmpLname from the EmployeeInfo table.

Query   Query History

```
1  select left(EmpLname, 4) EmpLname4 from EmployeeInfo
```

Data Output   Messages   Notifications

	emplname4 text
1	Mehr
2	Mish
3	Diwa
4	Kulk
5	Kapo

3. Write q query to find all the employees whose salary is between 50000 to 100000.

```
31  Select * From EmployeePosition Where salary Between 50000 and 100000
32
```

Data Output   Messages   Notifications

empid [PK] integer	empposition character varying (20)	dateofjoining date	salary integer
2	Executive	2022-05-02	75000
3	Manager	2022-05-01	90000
4	Lead	2022-05-02	85000

4. Write a query to find the names of employees that begin with 'S'.

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No limit

Query   Query History

```
1  select EmpFname ||' '|| EmpLname as EmpName from EmployeeInfo where EmpFname like 'S%'
```
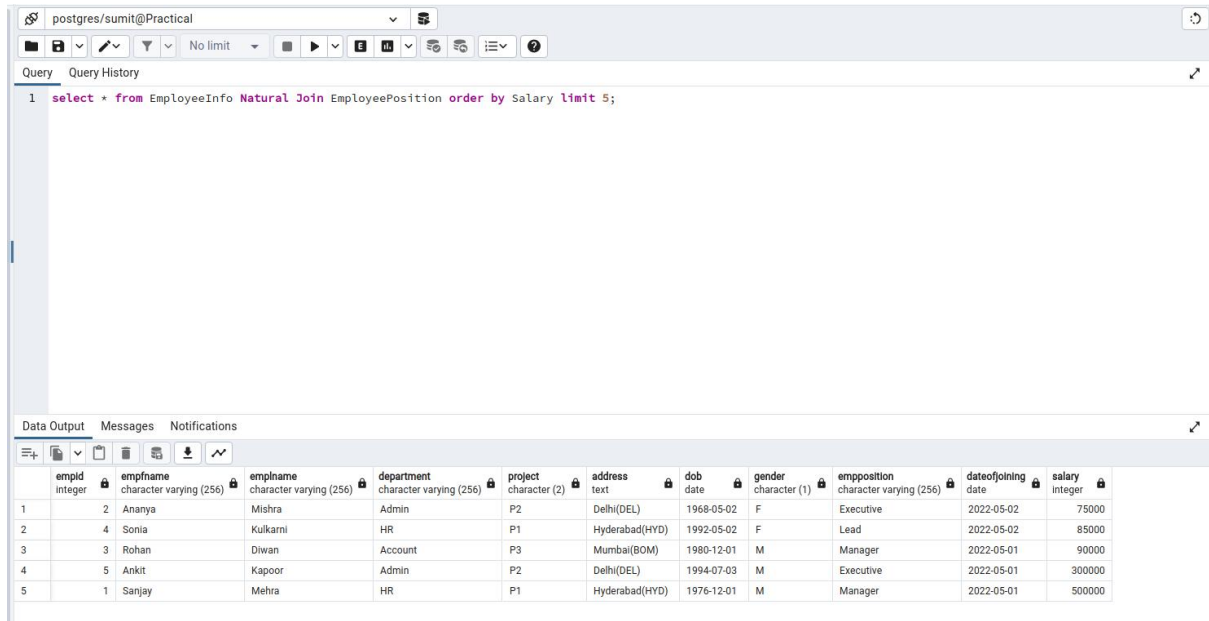
Data Output   Messages   Notifications

empname text
Sanjay Mehra
Sonia Kulkarni

5. Write a query to fetch top N records order by salary. (ex. top 5 records)

```
1  select * from EmployeeInfo Natural Join EmployeePosition order by Salary limit 5;
```

	empid integer	empfname character varying (256)	emplname character varying (256)	department character varying (256)	project character (2)	address text	dob date	gender character (1)	empposition character varying (256)	dateofjoining date	salary integer
1	2	Ananya	Mishra	Admin	P2	Delhi(DEL)	1968-05-02	F	Executive	2022-05-02	75000
2	4	Sonia	Kulkarni	HR	P1	Hyderabad(HYD)	1992-05-02	F	Lead	2022-05-02	85000
3	3	Rohan	Diwan	Account	P3	Mumbai(BOM)	1980-12-01	M	Manager	2022-05-01	90000
4	5	Ankit	Kapoor	Admin	P2	Delhi(DEL)	1994-07-03	M	Executive	2022-05-01	300000
5	1	Sanjay	Mehra	HR	P1	Hyderabad(HYD)	1976-12-01	M	Manager	2022-05-01	500000

6. Write a query to fetch details of all employees excluding the employees with first names, "Sanjay" and "Sonia" from the EmployeeInfo table.

Data Output   Messages   Notifications

	empid [PK] integer	empfname character varying (256)	emplname character varying (256)	department character varying (256)	project character (2)	address text	dob date	gender character (1)
1	2	Ananya	Mishra	Admin	P2	Delhi(DEL)	1968-05-02	F
2	3	Rohan	Diwan	Account	P3	Mumbai(BOM)	1980-12-01	M
3	5	Ankit	Kapoor	Admin	P2	Delhi(DEL)	1994-07-03	M

7. Write a query to fetch the department-wise count of employees sorted by department's count in ascending order.

```
1  select count (EmpID) Dept, Department
2      from  EmployeeInfo
3         Group by Department
4            Order by Dept
```

dept bigint	department character varying (256)
1	Account
2	Admin
2	HR

8. Create indexing for any particular field and show the difference in data fetching before and after indexing. (Use External Database)

Before Indexing :

After Indexing :

Properties SQL Statistics Dependencies Dependents Processes postgres/sumit@Practical* postgres/sumi...

postgres/sumit@Practical

No limit

Query Query History

```
1  select * from EmployeeInfo where Department = 'HR';
```

Data Output Messages Notifications

	empid [PK] integer	empfname character varying (256)	emplname character varying (256)	department character varying (256)	project character (2)	address text	dob date
1	1	Sanjay	Mehra	HR	P1	Hyderabad(HYD)	1976-12-01
2	4	Sonia	Kulkarni	HR	P1	Hyderabad(HYD)	1992-05-02

Total rows: 2 of 2   Query complete 00:00:00.056   Ln 1, Col 52