PostGreSQL

Questions

Ques.1. Write an SQL query to fetch the EmpId and FullName of all the employees working under Manager with id – '101'.

Ques.2. Write an SQL query to fetch the count of employees working in project 'P1'.

Ques.3. Write an SQL query to find the maximum, minimum, and average salary of the employees.

Ques.4. Write an SQL query to find the employee id whose salary lies in the range of 10000 and 15000.

Ques.5. Write an SQL query to display the total salary of each employee adding the Salary with Variable value.

Ques.6. Write an SQL query to fetch the EmpIds that are present in both the tables – 'EmployeeDetails' and 'EmployeeSalary.

Ques.7. Write an SQL query to upper case the name of the employee and lower case the city values.

Ques.8. Write an SQL query to fetch project-wise count of employees sorted by project's count in descending order.

Ques.9. Write an SQL query to fetch only odd rows from the table.

Ques.10. Write SQL query to find the 3rd highest salary from a table without using the TOP/limit keyword.

Solutions

Create database called **testdb**, and table named as **employeeDetails**

```
postgres=# create database testdb
postgres-# ;
CREATE DATABASE
postgres=# \dt
Did not find any relations.
postgres=# \c testdb
You are now connected to database "testdb" as user "postgres".
testdb=# create table employeeDetails (empid int, fullname varchar(20), managerid int, city varchar (10)

testdb(# );
CREATE TABLE
```

Insert values into **employeeDetails**

```
testdb=# insert into employeeDetails(empid, fullname, managerid, city)
testdb-# values (101, 'Harry Potter', 901, 'Delhi');
INSERT 0 1
testdb=# insert into employeeDetails(empid, fullname, managerid, city)
testdb-# values (102, 'Hermoine Granger', 902, 'Hyderabad');
INSERT 0 1
testdb=# insert into employeeDetails(empid, fullname, managerid, city)
testdb-# values (103, 'Ron Weasly', 903, 'Mumbai');
INSERT 0 1
testdb=# insert into employeeDetails(empid, fullname, managerid, city)
testdb-# values (103, 'Nevvile LongBottom', 101, 'Mumbai');
INSERT 0 1
```

1.

```
testdb=# select empid, fullname from employeeDetails
testdb-# where managerid=101;
 empid |      fullname
-------+--------------------
   103 | Nevvile LongBottom
(1 row)
```

Create table named as **employeeSalary** and insert values

```
testdb=# create table employeeSalary (empid int, project varchar(10), salary int, variable int);
CREATE TABLE
testdb=# insert into employeeSalary(empid, project, salary, variable)
testdb-# values (101, 'P1', 20000, 100);
INSERT 0 1
testdb=# insert into employeeSalary(empid, project, salary, variable)
testdb-# values (102, 'P2', 15000, 80);
INSERT 0 1
testdb=# insert into employeeSalary(empid, project, salary, variable)
testdb-# values (103, 'P3', 10000, 60);
INSERT 0 1
testdb=# insert into employeeSalary(empid, project, salary, variable)
testdb-# values (104, 'P4', 8000, 40);
INSERT 0 1
```

2.

```
testdb=# select count (*) from employeeSalary
testdb-# where project='P1';
 count
-------
     1
(1 row)
```

3.

```
testdb=# select max(salary), min(salary), avg(salary)
testdb-# from employeeSalary;
  max  | min  |        avg
-------+------+--------------------
 20000 | 8000 | 13250.000000000000
(1 row)
```

4.

```
testdb=# select empid, salary from employeeSalary
testdb-# where salary between 10000 and 15000
testdb-# ;
 empid | salary
-------+--------
   102 |  15000
   103 |  10000
(2 rows)
```

5.

```
testdb=# select empid, (salary + variable) as totalSalary
testdb-# from employeeSalary;
 empid | totalsalary
-------+-------------
   101 |       20100
   102 |       15080
   103 |       10060
   104 |        8040
(4 rows)
```

6.

```
testdb=# select empid from employeeDetails
testdb-# where empid in
testdb-# (select empid from employeeSalary);
 empid
-------
   101
   102
   103
   103
(4 rows)
```

7.

```
testdb=# select upper(fullname), lower(city)
testdb-# from employeeDetails;
       upper        |   lower
--------------------+-----------
 HARRY POTTER       | delhi
 HERMOINE GRANGER   | hyderabad
 RON WEASLY         | mumbai
 NEVVILE LONGBOTTOM | mumbai
(4 rows)
```

8.

```
testdb=# select project, count(empid) as projCount
testdb-# from employeeSalary
testdb-# group by project
testdb-# order by projCount desc;
 project | projcount
---------+-----------
 P2      |         1
 P1      |         1
 P4      |         1
 P3      |         1
(4 rows)
```

9.

```
testdb=# select * from employeeDetails
testdb-# where mod(empid,2) =1;
 empid |      fullname      | managerid |  city
-------+--------------------+-----------+--------
   101 | Harry Potter       |       901 | Delhi
   103 | Ron Weasly         |       903 | Mumbai
   103 | Nevvile LongBottom |       101 | Mumbai
(3 rows)
```

10.

```
testdb=# select max(salary) from employeeSalary
testdb-# where salary != (select max(salary) from employeeSalary
testdb(# where salary != (select max(salary) from employeeSalary))
testdb-# and salary != (select max(salary) from employeeSalary);
  max
-------
 10000
(1 row)
```