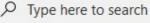


```
Server [localhost]: localhost
Database [postgres]: postgres
Port [5432]: 5432
Username [postgres]: postgres
Password for user postgres:
psql (15.2)
WARNING: Console code page (437) differs from Windows code page (1252)
        8-bit characters might not work correctly. See psql reference
        page "Notes for Windows users" for details.
Type "help" for help.
postgres=# select * from emp;
                salary
id
       name
112 | aditi
                 5500
113 | ishwari |
                  3000
114
    gauri
                  7000
115
     | vidya
                   8500
116
    l sai
                   500
117 | ram
                  2220
118
    ram
                  5500
119 | shree
                  7000
(8 rows)
postgres=#
```

```
postgres=# select id from emp;
id
112
113
114
115
116
117
118
119
(8 rows)
postgres=# select id from emp where id=112;
id
112
(1 row)
postgres=# select name,salary from emp ;
 name
          salary
 aditi
            5500
ishwari
            3000
gauri
            7000
            8500
vidya
sai
             500
            2220
 ram
ram
            5500
shree
            7000
(8 rows)
postgres=# select name from emp where salary=7000;
name
gauri
shree
(2 rows)
postgres=# select name from emp where salary>6000 and salary <1000;
name
(0 rows)
postgres=# _
       Type here to search
```

```
Select SQL Shell (psql)
postgres=# select distinct salary from emp;
salary
   8500
   7000
   3000
   500
  5500
   2220
(6 rows)
postgres=# select distinct name from emp;
gauri
vidya
ishwari
aditi
sai
shree
ram
(7 rows)
postgres=# select distinct name,salary from emp;
        salary
 name
shree
             7000
sai
              500
ishwari
             3000
gauri
             7000
             2220
ram
             5500
ram
vidya
             8500
aditi
             5500
(8 rows)
postgres=# select * from emp order by salary;
id | name | salary
116
       sai
                    500
117
                    2220
       ram
       ishwari
113
                    3000
       aditi
                    5500
112
                    5500
118
       ram
114
       gauri
                    7000
119
       shree
                    7000
115
      vidya
                    8500
(8 rows)
```























```
postgres=# select *from emp;
       name
                salary
      aditi
112
                  5500
      ishwari
                  3000
113 I
      gauri
                  7000
114
      vidya
115
                  8500
116
      sai
                   500
117
                  2220
      ram
                  5500
118
      ram
                  7000
119 | shree
(8 rows)
postgres=# select * from emp order by salary ;
      name
                salary
116 l
      sai
                   500
                  2220
117
      ram
      ishwari
                  3000
113 I
112
                  5500
      aditi
118
      ram
                  5500
114
      gauri
                  7000
      shree
119
                  7000
115 | vidya
                  8500
(8 rows)
postgres=# select * from emp order by salary desc;
id
      name
                salary
115
      vidya
                  8500
                  7000
119
      shree
114
      gauri
                  7000
112
      aditi
                  5500
118
      ram
                  5500
113 I
      ishwari
                  3000
117
                  2220
      ram
116 | sai
                   500
(8 rows)
postgres=# select id,salary
                                                                              (F)
                                                 Ħŧ
       Type here to search
```

```
postgres=# select id AS emp_id from emp;
 emp_id
    112
    113
    114
    115
    116
    117
    118
    119
(8 rows)
postgres=# select name as emp_name , salary as emp_salary from emp;
 emp_name | emp_salary
 aditi
                      5500
 ishwari
                      3000
 gauri
                      7000
 vidya
                      8500
 sai
                       500
                      2220
 ram
                      5500
 ram
                      7000
 shree
(8 rows)
postgres=# select salary from emp;
 salary
   5500
   3000
   7000
   8500
    500
   2220
   5500
   7000
(8 rows)
postgres=# select emp_salary from emp;
ERROR: column "emp_salary" does not exist
LINE 1: select emp_salary from emp;
postgres=#
```

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```
LINE 1: select emp_salary from emp;
postgres=# select *from emp;
id | name | salary
112
       aditi
                   5500
       ishwari
113
                   3000
114
                    7000
       gauri
115
       vidya
                   8500
116
       sai
                    500
117
       ram
                   2220
118
      ram
                   5500
119 | shree
                   7000
(8 rows)
postgres=# select *from emp limit 3;
id | name | salary
112 | aditi
                   5500
113 | ishwari
                   3000
114 gauri
                   7000
(3 rows)
postgres=# select id,salary from emp limit 4;
id | salary
112
         5500
113
         3000
114
         7000
115
         8500
(4 rows)
postgres=# seelct *from emp offset 3;
ERROR: syntax error at or near "seelct"
LINE 1: seelct *from emp offset 3;
postgres=# select *from emp offset 3;
id | name | salary
115 | vidya |
                 8500
     sai
                  500
116
     ram
                 2220
117
118 | ram
                 5500
119 | shree |
                 7000
(5 rows)
postgres=#
                                                                                     (D)
```

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```
postgres=# select *from emp offset 3;
id | name | salary
115 | vidya |
                8500
116
      sai
                 500
117 | ram
                2220
                5500
118 | ram
119 | shree
                7000
(5 rows)
postgres=# select id,salary from emp limit 4 offset 4;
id | salary
116
         500
117
        2220
118
        5500
119
        7000
(4 rows)
postgres=# select id,salary from emp limit 5 offset 6;
id | salary
118
        5500
119
        7000
(2 rows)
postgres=# select *from emp;
id | name
                salary
112 | aditi
                  5500
113 | ishwari
                  3000
114 gauri
                  7000
115 | vidya
                  8500
116 | sai
                  500
117
      ram
                  2220
118 | ram
                  5500
119 | shree
                  7000
(8 rows)
postgres=#
                                                Ħŧ
       Type here to search
```

```
SOL Shell (psgl)
                                                                                                                                                                                   - 0 X
postgres=# create database college;
CREATE DATABASE
postgres=# create table teacher( id int, name varchar , address varchar);
postgres=# create table student( rollno int, name varchar , address varchar);
CREATE TABLE
postgres=# show tables;
ERROR: unrecognized configuration parameter "tables"
postgres=# \dt+
                                     List of relations
Schema | Name | Type |
                            Owner
                                    | Persistence | Access method |
                                                                     Size
                                                                              Description
public | emp
                   table |
                          postgres | permanent
                                                   heap
                                                                  16 kB
                                                                  8192 bytes
public | student |
                   table |
                          postgres | permanent
                                                   heap
public | teacher | table | postgres | permanent
                                                   heap
                                                                  8192 bytes
(3 rows)
postgres=# \d
         List of relations
Schema Name Type
                           Owner
                   table | postgres
public | emp
public | student | table | postgres
public |
         teacher | table | postgres
(3 rows)
postgres=# discribe student;
ERROR: syntax error at or near "discribe"
LINE 1: discribe student;
postgres=# \d student
                   Table "public.student"
 Column
                Type
                            | Collation | Nullable | Default
 rollno | integer
name
          character varying
address | character varying
postgres=# \d teacher
                   Table "public.teacher"
                          | Collation | Nullable | Default
Column
                Type
id
          integer
name
          character varying
address | character varying
postgres=#
                                                                                                                                                                                ENG 11:34 PM
                                                                                                                                             之 27°C Partly cloudy 🔥 🗓 🖅 🎉 🕬
          Type here to search
```

```
postgres=# select *from teacher;
id | name | address
             kopargoan
100 | sai
101
    om
             shirdi
102
             nashik
    ram
103
             ttt
    abc
            | ttt
 13 abc
(5 rows)
postgres=# select * from student;
rollno | name | address
    10 | aditi
                  kopargoan
    11 | ishwari
                   kopargoan
    12
         abc
                   ppp
    12
         bac
                    rrr
    13 | abc
                  ttt
(5 rows)
postgres=# select *from teacher union select *from student;
id | name | address
100
    sai
               kopargoan
 10
      aditi
                kopargoan
102
      ram
                nashik
101
                shirdi
      om
 12
      bac
                rrr
 11
      ishwari
                kopargoan
103
      abc
                ttt
 13
      abc
                ttt
 12 abc
                ppp
(9 rows)
postgres=# select *from teacher intersect select *from student;
id | name | address
13 | abc | ttt
(1 row)
postgres=# select *from teacher union all select *from student;
id name address
100
      sai
                kopargoan
101
                shirdi
      om
102
      ram
                nashik
103
      abc
                ttt
 13
      abc
                ttt
 10 | aditi
               kopargoan
        Type here to search
```

```
postgres=# select *from emp;
       name
                salary
      aditi
112
                  5500
      ishwari
113
                  3000
114
      gauri
                  7000
      vidya
115
                  8500
116
      sai
                   500
117
                  2220
      ram
118
                  5500
      ram
119 | shree
                  7000
(8 rows)
postgres=# select sum(salary) from emp;
 sum
39220
(1 row)
postgres=# select avg(salary) as average_sal from emp;
     average_sal
4902.500000000000000000
(1 row)
postgres=# select max(salary) maximum_sal from emp;
maximum sal
       8500
(1 row)
postgres=# select min(salary) minimum_sal from emp;
minimum sal
        500
(1 row)
```



















```
DROP TABLE
postgres=# CREATE TABLE num example
postgres-# (Id SERIAL PRIMARY KEY,
postgres(# Name VARCHAR(50),
postgres(# Age INTEGER,
postgres(# Height NUMERIC(4,2)
postgres(#);
CREATE TABLE
postgres=#
postgres=# \d num example
                                  Table "public.num example"
                                | Collation | Nullable |
Column
                 Type
                                                                        Default
                                             not null | nextval('num example id seq'::regclass)
         integer
id
         character varying(50)
name
         integer
 age
height | numeric(4,2)
Indexes:
    "num example pkey" PRIMARY KEY, btree (id)
postgres=# CREATE TABLE char example (
postgres(# Id SERIAL PRIMARY KEY,
postgres(# Name CHAR(10),
postgres(# Description VARCHAR(100),
postgres(# Notes TEXT
postgres(# );
CREATE TABLE
postgres=# \d char example
                                     Table "public.char example"
   Column
                                      | Collation | Nullable |
                                                                              Default
                       Type
id
              integer
                                                   not null | nextval('char example id seq'::regclass)
              character(10)
 name
description
              character varying(100)
 notes
              text
Indexes:
    "char example pkey" PRIMARY KEY, btree (id)
```

postgres=# \_

```
postgres=# CREATE TABLE date example (
postgres(#
             Id SERIAL PRIMARY KEY,
postgres(#
            Event name VARCHAR(50),
postgres(#
             Start time TIMESTAMP WITHOUT TIME ZONE,
             End time TIMESTAMP WITH TIME ZONE,
postgres(#
             Event date DATE,
postgres(#
             Duration INTERVAL
postgres(#
postgres(# );
CREATE TABLE
postgres=# \d date_example
                                        Table "public.date example"
                                            Collation | Nullable |
                                                                                    Default
  Column
                         Type
 id
              integer
                                                        not null
                                                                   nextval('date example id seq'::regclass)
 event name
              character varying(50)
 start time
              timestamp without time zone
              timestamp with time zone
 end time
 event date
              date
duration
              interval
Indexes:
    "date_example_pkey" PRIMARY KEY, btree (id)
```

```
postgres=# CREATE TABLE geometry example (
postgres(# Id SERIAL PRIMARY KEY,
postgres(# Point geom POINT,
postgres(# Box geom BOX,
postgres(# Path geom PATH,
postgres(# Polygon geom POLYGON,
postgres(# Circle geom CIRCLE
postgres(# );
CREATE TABLE
postgres=# \d geometry example
                               Table "public.geometry example"
                         Collation | Nullable |
                                                                  Default
    Column
                Type
id
               integer
                                     not null | nextval('geometry example id seg'::regclass)
               point
 point geom
box geom
               box
path geom
               path
               polygon
polygon geom
circle geom
               circle
Indexes:
    "geometry example pkey" PRIMARY KEY, btree (id)
postgres=# CREATE TABLE array example (
postgres(# Id SERIAL PRIMARY KEY,
postgres(# Numbers INTEGER[],
postgres(# Words TEXT[]
postgres(# );
CREATE TABLE
postgres=# INSERT INTO array example (numbers, words)
postgres-# VALUES
postgres-# ('{1, 2, 3, 4, 5}', '{"apple", "banana", "orange"}');
ERROR: syntax error at or near "{"
         (`{1, 2, 3, 4, 5}', `{"apple", "banana", "orange"}');
LINE 3:
postgres=# insert into array example(number,words) values('{1,2,3,4,5}','{"apple","banana","orange"}');
ERROR: column "number" of relation "array example" does not exist
LINE 1: insert into array example(number,words) values('{1,2,3,4,5}'...
postgres=# insert into array_example(numbers,words) values('{1,2,3,4,5}','{"apple","banana","orange"}');
INSERT 0 1
postgres=# select *from array_example;
       numbers
                           words
 1 | {1,2,3,4,5} | {apple,banana,orange}
(1 row)
```