Note: semicolon must use at the end of linux command

|  |  |
| --- | --- |
| **Psql -U postgres** ; | initialize content |
| **\l** | for listing content |
| **Create database;** | database\_name\_1 |
| \c | To connect with something like database |
| \c database1; | Connect with database1 |
| \d | Display content |
| Create table table1(  Col1 int primary key,  Col2 varchar(20)); | Createing table |
| \d table\_name | Display table name |

|  |  |
| --- | --- |
| \q | Quit, Return into main linux screen |
| \c postgres | Connect to postgres |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Microsoft Windows [Version 10.0.19042.1165]

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C:\Users\Adarsh Kumar>psql -u postgres

psql: illegal option -- u

Try "psql --help" for more information.

C:\Users\Adarsh Kumar>psql -U postgres

Password for user postgres:

psql (13.4)

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** create database database1

**POSTGRES** \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-----------+----------+----------+--------------------+--------------------+-----------------------

postgres | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

template0 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(3 rows)

**POSTGRES** create database database1;

ERROR: syntax error at or near "create"

LINE 2: create database database1;

^

**POSTGRES** create database database1;

CREATE DATABASE

**POSTGRES** \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-----------+----------+----------+--------------------+--------------------+-----------------------

database1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

postgres | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

template0 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(4 rows)

**POSTGRES** \c database1

You are now connected to database "database1" as user "postgres".

**database1=#** \d

Did not find any relations.

**database1=#** \d;

invalid command \d;

Try \? for help.

**database1=#** \c database1;

You are now connected to database "database1" as user "postgres".

**database1=#** \d

Did not find any relations.

**database1=#** create table table1(

database1(# col1 int primary key,

database1(# col2 varchar(40));

CREATE TABLE

**database1=#** \d

List of relations

Schema | Name | Type | Owner

--------+--------+-------+----------

public | table1 | table | postgres

(1 row)

**database1=#** \d table1;

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1=#** tabl1

**database1-#**

**database1-#** \p

tabl1

**database1-#** create table table1

**database1-#** \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-----------+----------+----------+--------------------+--------------------+-----------------------

database1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

postgres | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

template0 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(4 rows)

**database1-#** \d database1

Did not find any relation named "database1".

**database1-#** database1

**database1-#** \d table1

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1-#** \lr

invalid command \lr

Try \? for help.

**database1-#** \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-----------+----------+----------+--------------------+--------------------+-----------------------

database1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

postgres | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

template0 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(4 rows)

**database1-#** \d

List of relations

Schema | Name | Type | Owner

--------+--------+-------+----------

public | table1 | table | postgres

(1 row)

**database1-#** create table table2()

**database1-#** create table table2(col3 int primary key,

database1(# col4 varchar(78) not null);

ERROR: syntax error at or near "tabl1"

LINE 1: tabl1

^

**database1=#** create table table2(col2 int primary key,

database1(# col3 varchar(30) not null);

CREATE TABLE

**database1=#** \d

List of relations

Schema | Name | Type | Owner

--------+--------+-------+----------

public | table1 | table | postgres

public | table2 | table | postgres

(2 rows)

**database1=#** \d table1

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1=#** \d table2

Table "public.table2"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col2 | integer | | not null |

col3 | character varying(30) | | not null |

Indexes:

"table2\_pkey" PRIMARY KEY, btree (col2)

**database1=#** insert into table1(col1,col2) values(1,"adarsh");

ERROR: column "adarsh" does not exist

LINE 1: insert into table1(col1,col2) values(1,"adarsh");

^

**database1=#** insert into table1(col1,col2) values(1,adarsh);

ERROR: column "adarsh" does not exist

LINE 1: insert into table1(col1,col2) values(1,adarsh);

^

**database1=#** insert into table1 (col1,col2) values(1,adarsh);

ERROR: column "adarsh" does not exist

LINE 1: insert into table1 (col1,col2) values(1,adarsh);

^

**database1=#** insert into table1 (col1,col2) values(1,"adarsh");

ERROR: column "adarsh" does not exist

LINE 1: insert into table1 (col1,col2) values(1,"adarsh");

^

**database1=#** insert into table1 (col1,col2) values( 8 "adarsh");

ERROR: syntax error at or near ""adarsh""

LINE 1: insert into table1 (col1,col2) values( 8 "adarsh");

^

**database1=#** insert into table1 (col1,col2) values( 8, 'adarsh');

INSERT 0 1

**database1=#** \d table1

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1=#** \d table1;

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1=#** select \* from table1

**database1-#** select \* from table1;

ERROR: syntax error at or near "select"

LINE 2: select \* from table1;

^

**database1=#** \d table1

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1=#** select \* from table1;

col1 | col2

------+--------

8 | adarsh

(1 row)

**database1=#** select \* from table2;

col2 | col3

------+------

(0 rows)

**database1=#** insert into table1 (col1,col2) values(9, 'adarsh9');

INSERT 0 1

**database1=#** insert into table1 (col1,col2) values(10, 'adarsh10');

INSERT 0 1

**database1=#** insert into table1 (col1,col2) values(10, 'adarsh11');

ERROR: duplicate key value violates unique constraint "table1\_pkey"

DETAIL: Key (col1)=(10) already exists.

**database1=#** insert into table1 (col1,col2) values(11, 'adarsh11');

INSERT 0 1

**database1=#** \d table1

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1=#** select \* from table1;

col1 | col2

------+----------

8 | adarsh

9 | adarsh9

10 | adarsh10

11 | adarsh11

(4 rows)

**database1=#** \d table2

Table "public.table2"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col2 | integer | | not null |

col3 | character varying(30) | | not null |

Indexes:

"table2\_pkey" PRIMARY KEY, btree (col2)

**database1=#** insert into table2 (col2,col3) values(1, 'adarsh1');

INSERT 0 1

**database1=#** insert into table2 (col2,col3) values(21, 'adars21');

INSERT 0 1

**database1=#** insert into table2 (col2,col3) values(31, 'adars31');

INSERT 0 1

**database1=#** insert into table2 (col2,col3) values(41, 'adars41');

INSERT 0 1

**database1=#** table2

**database1-#** \d table2

Table "public.table2"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col2 | integer | | not null |

col3 | character varying(30) | | not null |

Indexes:

"table2\_pkey" PRIMARY KEY, btree (col2)

**database1-#** select \* from tabl21;

ERROR: syntax error at or near "table2"

LINE 1: table2

^

**database1=#** select \* from tabl2;

ERROR: relation "tabl2" does not exist

LINE 1: select \* from tabl2;

^

**database1=#** select \* from table2;

col2 | col3

------+---------

1 | adarsh1

21 | adars21

31 | adars31

41 | adars41

(4 rows)

**database1=#** select \* frm table1,table2;

ERROR: syntax error at or near "frm"

LINE 1: select \* frm table1,table2;

^

**database1=#** select \* from table1,table2;

col1 | col2 | col2 | col3

------+----------+------+---------

8 | adarsh | 1 | adarsh1

9 | adarsh9 | 1 | adarsh1

10 | adarsh10 | 1 | adarsh1

11 | adarsh11 | 1 | adarsh1

8 | adarsh | 21 | adars21

9 | adarsh9 | 21 | adars21

10 | adarsh10 | 21 | adars21

11 | adarsh11 | 21 | adars21

8 | adarsh | 31 | adars31

9 | adarsh9 | 31 | adars31

10 | adarsh10 | 31 | adars31

11 | adarsh11 | 31 | adars31

8 | adarsh | 41 | adars41

9 | adarsh9 | 41 | adars41

10 | adarsh10 | 41 | adars41

11 | adarsh11 | 41 | adars41

(16 rows)

**database1=#** select \* from table1,table2

**database1-#** where table1.col1=8;

col1 | col2 | col2 | col3

------+--------+------+---------

8 | adarsh | 1 | adarsh1

8 | adarsh | 21 | adars21

8 | adarsh | 31 | adars31

8 | adarsh | 41 | adars41

(4 rows)

**database1=#** select \* from table1,table2 where table2.col2=1 and table1.col1=8;

col1 | col2 | col2 | col3

------+--------+------+---------

8 | adarsh | 1 | adarsh1

(1 row)

**database1=#** \d table1

Table "public.table1"

Column | Type | Collation | Nullable | Default

--------+-----------------------+-----------+----------+---------

col1 | integer | | not null |

col2 | character varying(40) | | |

Indexes:

"table1\_pkey" PRIMARY KEY, btree (col1)

**database1=#** select \* from table1;

col1 | col2

------+----------

8 | adarsh

9 | adarsh9

10 | adarsh10

11 | adarsh11

(4 rows)

**database1=#** delete from table1 where col2=8;

ERROR: operator does not exist: character varying = integer

LINE 1: delete from table1 where col2=8;

^

HINT: No operator matches the given name and argument types. You might need to add explicit type casts.

**database1=#** delete from table1 where col1=8;

DELETE 1

**database1=#** select \* from table1;

col1 | col2

------+----------

9 | adarsh9

10 | adarsh10

11 | adarsh11

(3 rows)

**database1=#** \d database;

Did not find any relation named "database".

**database1=#** \d database1;

Did not find any relation named "database1".

**database1=#** \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-----------+----------+----------+--------------------+--------------------+-----------------------

database1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

postgres | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

template0 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(4 rows)

**database1=#** \d database1;

Did not find any relation named "database1".

**database1=#** \l database1;

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-----------+----------+----------+--------------------+--------------------+-------------------

database1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

(1 row)

**database1=#** \d

List of relations

Schema | Name | Type | Owner

--------+--------+-------+----------

public | table1 | table | postgres

public | table2 | table | postgres

(2 rows)

**database1=#** drop table table1;

DROP TABLE

**database1=#** \d

List of relations

Schema | Name | Type | Owner

--------+--------+-------+----------

public | table2 | table | postgres

(1 row)

**database1=#** \c postgres;

You are now connected to database "postgres" as user "postgres".

**POSTGRES** \d

Did not find any relations.

**POSTGRES** \l

List of databases

Name | Owner | Encoding | Collate | Ctype | Access privileges

-----------+----------+----------+--------------------+--------------------+-----------------------

database1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

postgres | postgres | UTF8 | English\_India.1252 | English\_India.1252 |

template0 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | English\_India.1252 | English\_India.1252 | =c/postgres +

| | | | | postgres=CTc/postgres

(4 rows)

**POSTGRES** \q

C:\Users\Adarsh Kumar>

/\*

alter table trial drop col1

alter table trial add col22 integer;

alter table trial drop column col2;

select \* from public.trial;

insert into trial values(11);

insert into trial values(Null);

insert into trial values(8);

select count(\*) from trial;

select \* from trial;

alter table trial add col22 integer;

insert into trial values(Null)

\*/

alter table trial add col938 varchar(20);

**week-2 Practice sql**

/\*

select distinct m1.name from managers as m1,teams as t1

where m1.team\_id=t1.team\_id and t1.name='All Stars'

select distinct m1.name from managers as m1,teams as t1

where m1.team\_id=t1.team\_id

select b1.title from book\_catalogue as b1 , book\_authors as b2

where b1.isbn\_no=b2.isbn\_no and b2.author\_fname ='Joh Paul' and b2.author\_lname='Mueller'

select title from book\_catalogue where publisher='McGraw Hill Education'

an SQL statement to display the first name and the last name of students (stu-

dent fname, student lname) pursuing ‘PG’ courses.

\*/

**Grade assignment**

**/\***

Write an SQL statement to find the match numbers of those matches in which the host

team scored more (goals) than the guest team.

select match\_num from matches where host\_team\_score> guest\_team\_score

Write an SQL statement to find the colors of the home-jersey and the away-jersey (jer-

sey home color, jersey away color) used by the team: “All Stars”.

select t1.jersey\_home\_color, t1.jersey\_away\_color from teams as t1 where name='All Stars'

Write an SQL statement to find the names of players of the team: “All Stars”.

select p.name from teams as t,players as p where t.name='All Stars' and t.team\_id=p.team\_id

Write an SQL statement to find the first names and the last names (student fname,

student lname) of students who belong to the department with department code as

”MCA” and who were born after ’2002-06-15’.

select student\_fname, student\_lname from students where department\_code='MCA' and dob> '2002-06-15'

Write an SQL statement to find the first names and the last names of faculty (fac-

ulty fname, faculty lname) who belong to the department: ”Computer Science”.

select f.faculty\_fname, f.faculty\_lname from faculty as f,departments as d

where d.department\_name= 'Computer Science' and f.department\_code=d.department\_code

**\*/**

