

OS: Ubuntu on Mac(arm chip) virtual machine

C version=11.4.0

Postgres's version=14.9

Steps involved in install postgresSQL:

Downloaded and unzipped the postgresSql source code

Excited following commands:

Cd postgresql

./configure

make

make check(all 211 test cases passed)

make install

sudo adduser postgres(adding a user)

mkdir /usr/local/pgsql/data(creating directory to store the data)

chown postgres /usr/local/pgsql/data (giving database access to postgres user)

su - postgres(logging into postgres user)

/usr/local/pgsql/bin/initdb -D /usr/local/pgsql/data(initializing database)

/usr/local/pgsql/bin/pg_ctl -D /usr/local/pgsql/data -l logfile start(starting the database)

/usr/local/pgsql/bin/createdb test(creating a test database)

/usr/local/pgsql/bin/psql test(using test database)

Test scripts:

```
CREATE TABLE department ( id serial PRIMARY KEY, name varchar(50) NOT NULL,
manager_id int NOT NULL ); INSERT INTO department (name, manager_id) VALUES
('Sales', 1), ('Marketing', 2), ('Engineering', 3), ('Finance', 4), ('Human Resources', 5);
```

```
CREATE TABLE students ( id serial PRIMARY KEY, name varchar(255) NOT NULL,
email varchar(255) NOT NULL, gpa numeric(2,1) ); INSERT INTO students (name,
email, gpa) VALUES ('John Doe', 'johndoe@example.com', 3.8), ('Jane Doe',
'janedoe@example.com', 3.9), ('Ashley Smith', 'ashleymith@example.com', 3.7),
('Michael Brown', 'michaelbrown@example.com', 3.6), ('Maria Garcia',
'mariagarcia@example.com', 3.5);
```

```

test=# \q
Use \q to quit.
test=# \q
postgres@ubuntu:~$ gcc --version
gcc (Ubuntu 11.4.0-1ubuntu1~22.04) 11.4.0
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This is free software; see the source for copying conditions. There is NO
warranty; not even for MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.

postgres@ubuntu:~$ /usr/local/pgsql/bin/pg_ctl -D /usr/local/pgsql/data -l logfile start
pg_ctl: another server might be running; trying to start server anyway
waiting for server to start.... stopped waiting
pg_ctl: could not start server
Examine the log output.
postgres@ubuntu:~$ /usr/local/pgsql/bin/psql test
psql (14.9)
Type "help" for help.

test=# \dt
          List of relations
Schema |   Name   | Type | Owner
-----+-----+-----+-----
public | department | table | postgres
public | students   | table | postgres
(2 rows)

test=# select * from department;
 id |   name   | manager_id
-----+-----+-----
  1 | Sales    |          1
  2 | Marketing |          2
  3 | Engineering |        3
  4 | Finance  |          4
  5 | Human Resources |        5
(5 rows)

test=# select * from students;
 id |   name   | age |   address
-----+-----+-----+-----
  1 | John Doe |  18 | 123 Main Street
  2 | Jane Doe |  19 | 456 Elm Street
  3 | Peter Parker | 20 | 789 Oak Street
(3 rows)

test=#

```