PostgreSQL ho tro ca 2 kieu truy van la sql(csdl quan he) va json(csdl ko quan he)

219 $ sudo sh -c 'echo "deb http://apt.postgresql.org/pub/repos/apt $(lsb\_release -cs)-pgdg main" > /etc/apt/sources.list.d/pgdg.list'

220 sudo sh -c 'echo "deb http://apt.postgresql.org/pub/repos/apt $(lsb\_release -cs)-pgdg main" > /etc/apt/sources.list.d/pgdg.list'

221 $ wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -

222 wget --quiet -O - https://www.postgresql.org/media/keys/ACCC4CF8.asc | sudo apt-key add -

223 sudo apt-get update

224 sudo apt-get install postgresql

225 ls

226 cd /

227 ls

228 cd var/run

229 ls

230 cd

231 ps -ef | grep postgres

232 man postgres

233 history

Success. You can now start the database server using:

pg\_ctlcluster 12 main start

311 systemctl status postgresql@13-main.service

312 systemctl start postgresql.service

313 service postgresql start

314 systemctl status postgresql.service

315 service postgresql status

316 history

root@DESKTOP-4BUKIB6:/# cd \mnt 🡺 tro den thu muc mnt

root@DESKTOP-4BUKIB6:/mnt# ls

c d 🡺 kiem tra cac o co trong mnt (c va d)

1 : Tai con tro Root,chay lenh sau de con tro tro den postgres => root@DESKTOP-4BUKIB6:/# su postgres 🡺 postgres@DESKTOP-4BUKIB6:/root$

2 : postgres@DESKTOP-4BUKIB6:/root$ cd .. 🡺 cd de ra khoi thu muc root$,hien tai con tro dang nam tai postgres 🡺 postgres@DESKTOP-4BUKIB6:/$

3 : service postgresql start : chay tai con tro Root de khoi dong postgresql

1 : root@DESKTOP-4BUKIB6:/# ls 🡺 xem cac folder hien tai

2 : root@DESKTOP-4BUKIB6:/# sudo su postgres 🡺 tro den postgres

3 : postgres@DESKTOP-4BUKIB6:/$ psql 🡺 ket noi voi postgres

4 : postgres=# \l 🡺 xem danh sach cac database hien tai

5 : postgres=# \c postgres 🡺 ket noi voi database postgres(postgres o day la ten cua 1 database nguoi dung dat ten,ko phai ten ngon ngu truy van) You are now connected to database "postgres" as user "postgres".

6 :postgres=# \dt

List of relations

Schema | Name | Type | Owner

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

public | accounts | table | postgres

public | basket\_a | table | postgres

public | basket\_b | table | postgres

public | information | table | postgres

sv

postgres@DESKTOP-4BUKIB6:/$ psql

psql (13.1 (Ubuntu 13.1-1.pgdg18.04+1))

Type "help" for help.

postgres=# \c postgres

postgres=# CREATE USER myUser WITH PASSWORD '123';

Tao moi table accounts:create table accounts(user\_id serial PRIMARY KEY,username VARCHAR(50) UNIQUE NOT NULL,password VARCHAR(50) NOT NULL,email VARCHAR(255) UNIQUE NOT NULL,create

d\_on TIMESTAMP NOT NULL,last\_login TIMESTAMP);

postgres=# INSERT INTO information (url,name) values('laquythi.github.io','thilaquy');

INSERT 0 1 => co nghia la insert thanh cong du lieu

postgres=# SELECT \* FROM information; 🡺 truy van thanh cong

postgres=# update information set last\_update = '2020-05-25' where id = 1; 🡺 update thanh cong

INNER JOIN 🡺 postgres=# select a,fruit\_a,b,fruit\_b from basket\_a inner join basket\_b on fruit\_b = fruit\_a;

a | fruit\_a | b | fruit\_b

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

2 | orange | 1 | orange

5 | dragonball | 5 | dragonball

(2 rows)

cum tu “left join” or “right join” la trung tam

LEFT JOIN :neu “left join” 🡺 tra ve toan bo bang phia ben trai cum tu “left join”,neu co ban ghi nao cua bang ben phai == ban ghi cua bang ben trai thi tra ve,neu ko tra ve NULL.

RIGHT JOIN : neu “right join” 🡺 tra ve toan bo bang phia ben phai cum tu “right join”,neu co ban ghi nao cua bang ben trai == ban ghi cua bang ben phai thi tra ve,neu ko tra ve NULL.

LEFT JOIN 🡺 postgres=# select a,fruit\_a,b,fruit\_b from basket\_b left join basket\_a on fruit\_b = fruit\_a;

a | fruit\_a | b | fruit\_b

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

2 | orange | 1 | orange

| | 2 | Apple

| | 3 | watermelon

| | 4 | Pear

5 | dragonball | 5 | dragonball

| | 6 | sau rieng

| | 7 | dua hau

RIGHT JOIN 🡺 postgres=# select b,fruit\_b,a,fruit\_a from basket\_b right join basket\_a on fruit\_b = fruit\_a;

b | fruit\_b | a | fruit\_a

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

| | 1 | apple

1 | orange | 2 | orange

| | 3 | banana

| | 4 | lemon

5 | dragonball | 5 | dragonball

FULL JOIN 🡺 postgres=# select a,fruit\_a,b,fruit\_b from basket\_a full join basket\_b on fruit\_a = fruit\_b;

a | fruit\_a | b | fruit\_b

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

1 | apple | |

2 | orange | 1 | orange

3 | banana | |

4 | lemon | |

5 | dragonball | 5 | dragonball

| | 2 | Apple

| | 7 | dua hau

| | 3 | watermelon

| | 4 | Pear

| | 6 | sau rieng

(10 rows) Lay ra tat ca cac ban ghi thoa man 1 trong cac dieu kien (OR)

FETCH 🡺 postgres=# select \* from basket\_b fetch first 3 row only;

b | fruit\_b

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

1 | orange

2 | Apple

3 | watermelon

(3 rows) : Fetch lay ra 1 phan cua table.

TEST TRUY CAP POSTGRES TOI 29-12 :

TEST LAN 2

1 🡺 root@DESKTOP-4BUKIB6:~# service postgresql start

\* Starting PostgreSQL 13 database server [ OK ]

2 🡺 root@DESKTOP-4BUKIB6:~# sudo su postgres

3 🡺 postgres@DESKTOP-4BUKIB6:/root$ cd ..

4 🡺 postgres@DESKTOP-4BUKIB6:/$ psql

psql (13.1 (Ubuntu 13.1-1.pgdg18.04+1))

Type "help" for help.

postgres=#

5 🡺 postgres=# \l 🡺 xem cac databases hien co

List of databases

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

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

mydb | postgres | UTF8 | C.UTF-8 | C.UTF-8 |

postgres | postgres | UTF8 | C.UTF-8 | C.UTF-8 |

template0 | postgres | UTF8 | C.UTF-8 | C.UTF-8 | =c/postgres +

| | | | | postgres=CTc/postgres

template1 | postgres | UTF8 | C.UTF-8 | C.UTF-8 | =c/postgres +

| | | | | postgres=CTc/postgres

(4 rows)

postgres=#

6 🡺 sau do truy cap vao database postgres

postgres=# \c postgres

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

7 🡺 dt(data table),hien thi toan bo cac table co trong database

postgres-# \dt

List of relations

Schema | Name | Type | Owner

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

public | accounts | table | postgres

public | basket\_a | table | postgres

public | basket\_b | table | postgres

public | information | table | postgres

(4 rows)

8 🡺 lay ra toan bo record co trong table information

postgres=# SELECT \* FROM information;

id | url | name | description | last\_update

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

2 | hellenforex.com | hellen tran | banker | 2020-12-29

3 | Micweb.com | Mic | solution | 2020-02-14

1 | laquythi.github.io | thilaquy | | 2020-05-25

4 | haui.edu.vn | Haui | tu liem ha noi | 2012-06-10

5 | bacdongquan.edu.vn | THPT bac dong quan | dong hung thai binh | 2009-06-20

(5 rows)

9 🡺 tiep tuc demo : lay ra toan bo cac ban ghi (record) co trong table basket\_a

postgres=# SELECT \* FROM basket\_a;

a | fruit\_a

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

1 | apple

2 | orange

3 | banana

4 | lemon

5 | dragonball

(5 rows)