Tên: Trần Nguyễn Quốc Cường

Lớp: SE1709

Bài tập SQL

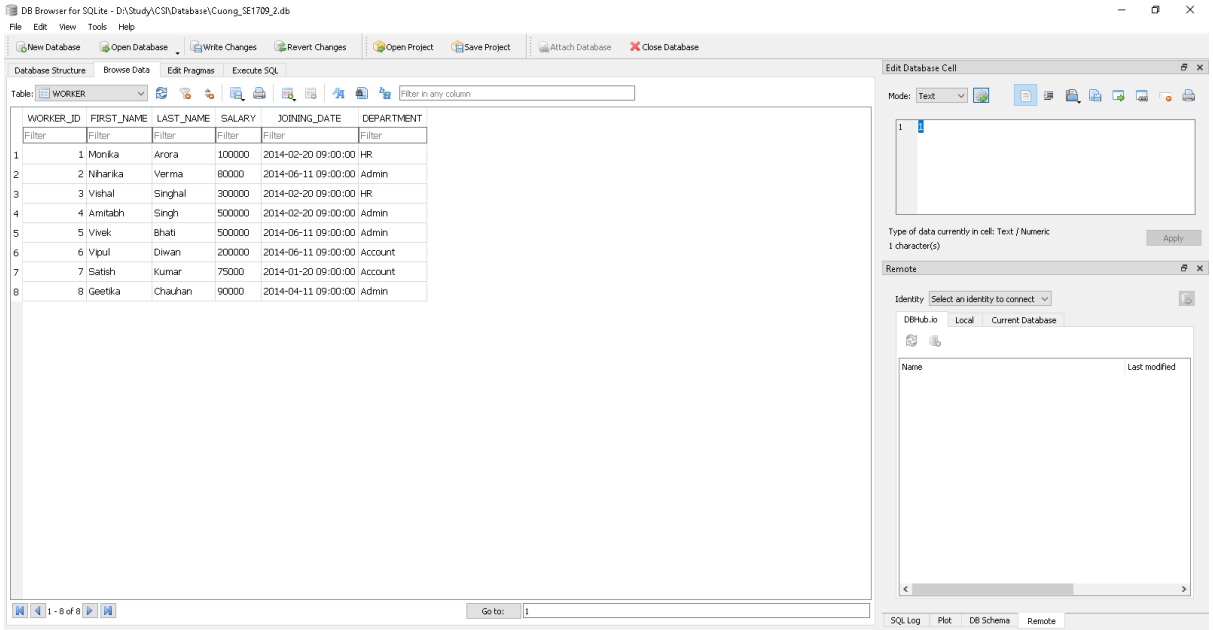
1.

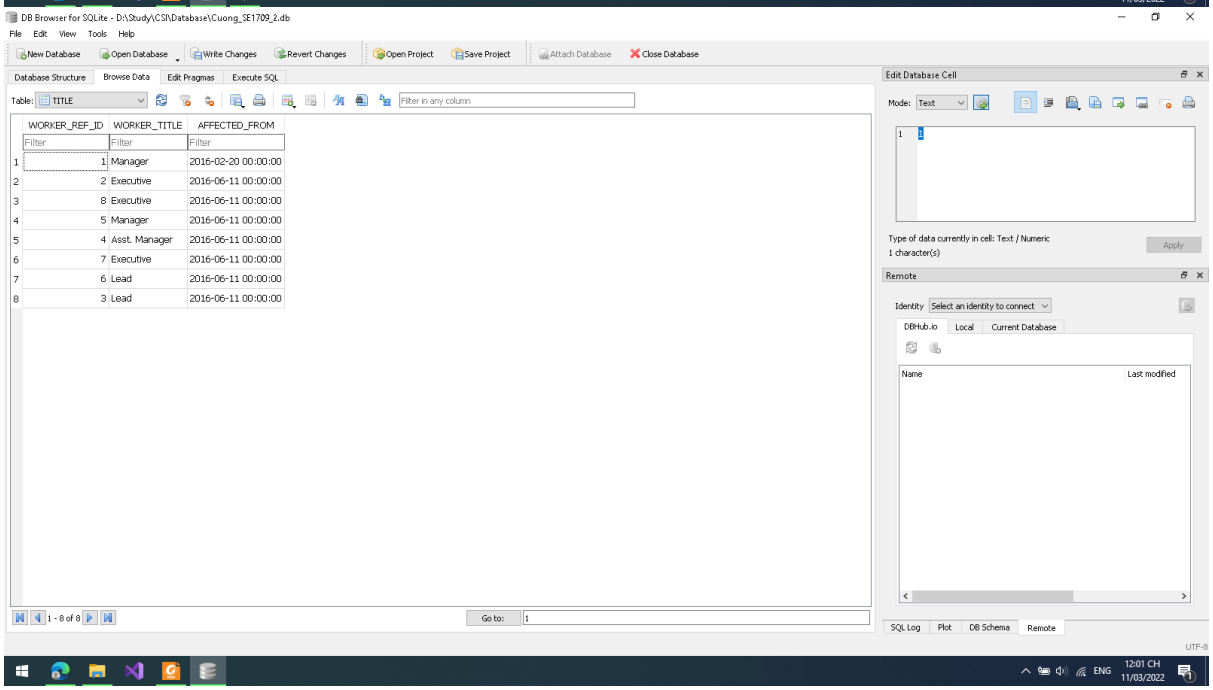
Code:

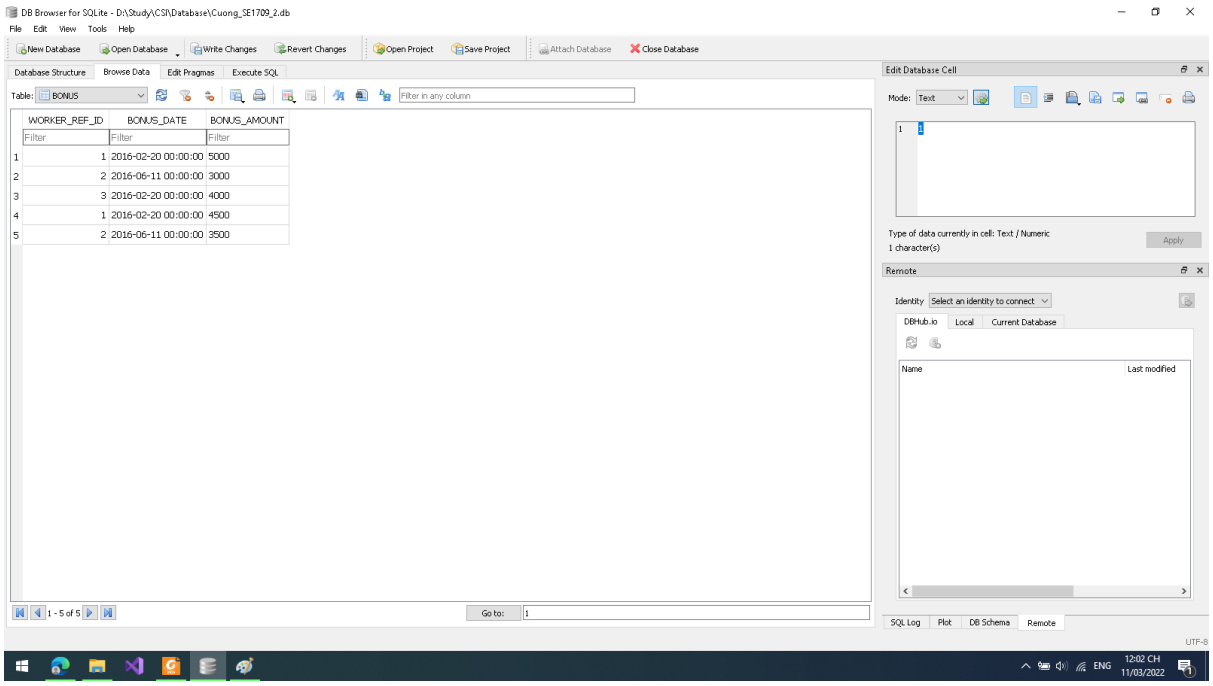
```
CREATE TABLE WORKER (
WORKER_ID INT NOT NULL PRIMARY KEY,
FIRST_NAME CHAR(25),
LAST_NAME CHAR(25),
SALARY INT(15),
JOINING_DATE DATETIME,
DEPARTMENT CHAR(25)
);

insert into WORKER
(WORKER_ID, FIRST_NAME, LAST_NAME, SALARY, JOINING_DATE, DEPARTMENT) values
(001, 'Monika', 'Arora', 100000, '2014-02-20 09:00:00', 'HR'),
(002, 'Niharika', 'Verma', 80000, '2014-06-11 09:00:00', 'Admin'),
(003, 'Vishal', 'Singhal', 300000, '2014-02-20 09:00:00', 'HR'),
(004, 'Amitabh', 'Singh', 500000, '2014-02-20 09:00:00', 'Admin'),
(005, 'Vivek', 'Bhati', 500000, '2014-06-11 09:00:00', 'Admin'),
(006, 'Vipul', 'Diwan', 200000, '2014-06-11 09:00:00', 'Account'),
(007, 'Satish', 'Kumar', 75000, '2014-01-20 09:00:00', 'Account'),
(008, 'Geetika', 'Chauhan', 90000, '2014-04-11 09:00:00', 'Admin');

CREATE TABLE TITLE (
WORKER_REF_ID INT,
WORKER_TITLE CHAR(25),
AFFECTED_FROM DATETIME,
FOREIGN KEY (WORKER_REF_ID) REFERENCES Worker(WORKER_ID)
ON DELETE CASCADE
);
```

```
insert into TITLE
(WORKER_REF_ID, WORKER_TITLE, AFFECTED_FROM) values
(1, 'Manager', '2016-02-20 00:00:00'),
(2, 'Executive', '2016-06-11 00:00:00'),
(8, 'Executive', '2016-06-11 00:00:00'),
(5, 'Manager', '2016-06-11 00:00:00'),
(4, 'Asst. Manager', '2016-06-11 00:00:00'),
(7, 'Executive', '2016-06-11 00:00:00'),
(6, 'Lead', '2016-06-11 00:00:00'),
(3, 'Lead', '2016-06-11 00:00:00');

CREATE TABLE BONUS (
WORKER_REF_ID INT,
BONUS_DATE DATETIME,
BONUS_AMOUNT INT(10),
FOREIGN KEY (WORKER_REF_ID) REFERENCES Worker(WORKER_ID)
ON DELETE CASCADE
);

insert into BONUS
(WORKER_REF_ID, BONUS_DATE, BONUS_AMOUNT) values
(001, '2016-02-20 00:00:00', 5000),
(002, '2016-06-11 00:00:00', 3000),
(003, '2016-02-20 00:00:00', 4000),
(001, '2016-02-20 00:00:00', 4500),
(002, '2016-06-11 00:00:00', 3500);
```

Kết quả:


DB Browser for SQLite - D:\Study\CSI\Database\Cuong_SE1709_2.db
File Edit View Tools Help
New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database
Database Structure Browse Data Edit Pragmas Execute SQL
Table: WORKER
Filter in any column
WORKER_ID FIRST_NAME LAST_NAME SALARY JOINING_DATE DEPARTMENT
1 1 Monika Arora 100000 2014-02-20 09:00:00 HR
2 2 Niharika Verma 80000 2014-06-11 09:00:00 Admin
3 3 Vishal Singhal 300000 2014-02-20 09:00:00 HR
4 4 Amitabh Singh 500000 2014-02-20 09:00:00 Admin
5 5 Vivek Bhati 500000 2014-06-11 09:00:00 Admin
6 6 Vipul Diwan 200000 2014-06-11 09:00:00 Account
7 7 Satish Kumar 75000 2014-01-20 09:00:00 Account
8 8 Geetika Chauhan 90000 2014-04-11 09:00:00 Admin
1 - 8 of 8
Go to: 1
Edit Database Cell
Mode: Text
Type of data currently in cell: Text / Numeric
1 character(s)
Apply
Remote
Identity Select an identity to connect
DBHub.io Local Current Database
Name Last modified
SQL Log Plot DB Schema Remote
UTF-8
ENG 12:01 CH 11/03/2022


DB Browser for SQLite - D:\Study\CSI\Database\Cuong_SE1709_2.db
File Edit View Tools Help
New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database
Database Structure Browse Data Edit Pragmas Execute SQL
Table: TITLE
Filter in any column
WORKER_REF_ID WORKER_TITLE AFFECTED_FROM
1 1 Manager 2016-02-20 00:00:00
2 2 Executive 2016-06-11 00:00:00
3 8 Executive 2016-06-11 00:00:00
4 5 Manager 2016-06-11 00:00:00
5 4 Asst. Manager 2016-06-11 00:00:00
6 7 Executive 2016-06-11 00:00:00
7 6 Lead 2016-06-11 00:00:00
8 3 Lead 2016-06-11 00:00:00
1 - 8 of 8
Go to: 1
Edit Database Cell
Mode: Text
Type of data currently in cell: Text / Numeric
1 character(s)
Apply
Remote
Identity Select an identity to connect
DBHub.io Local Current Database
Name Last modified
SQL Log Plot DB Schema Remote
UTF-8
ENG 12:01 CH 11/03/2022

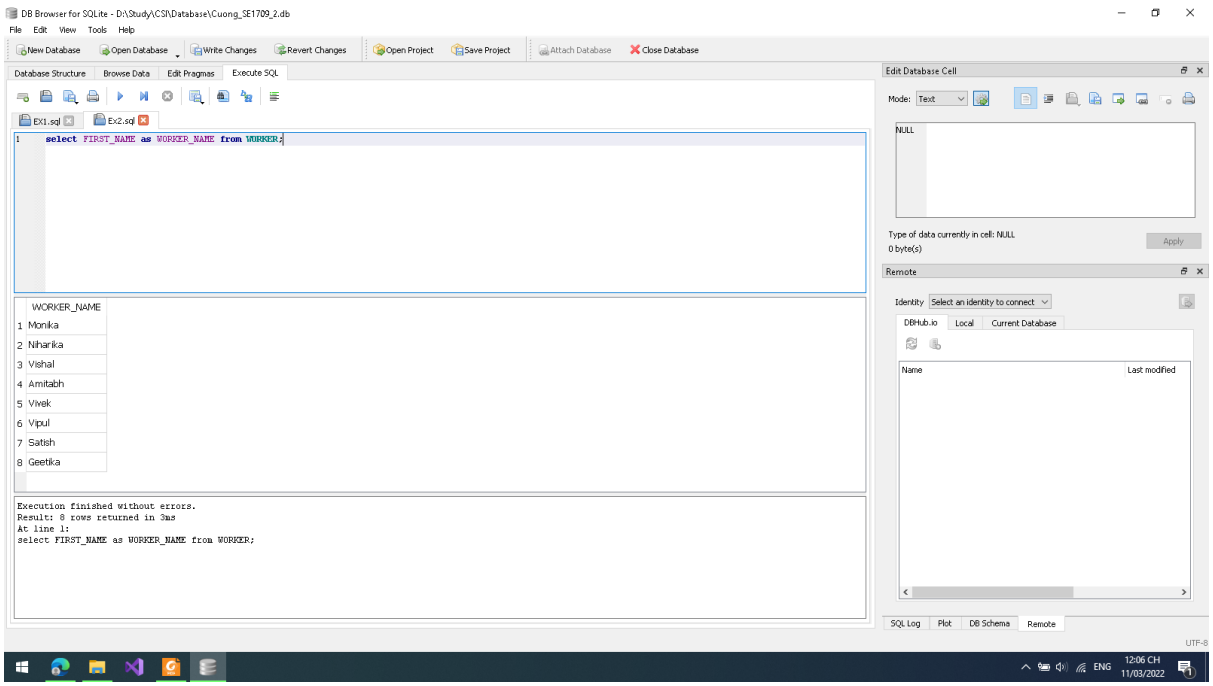


2.

Code:

```
select FIRST_NAME as WORKER_NAME from WORKER;
```

Kết quả:

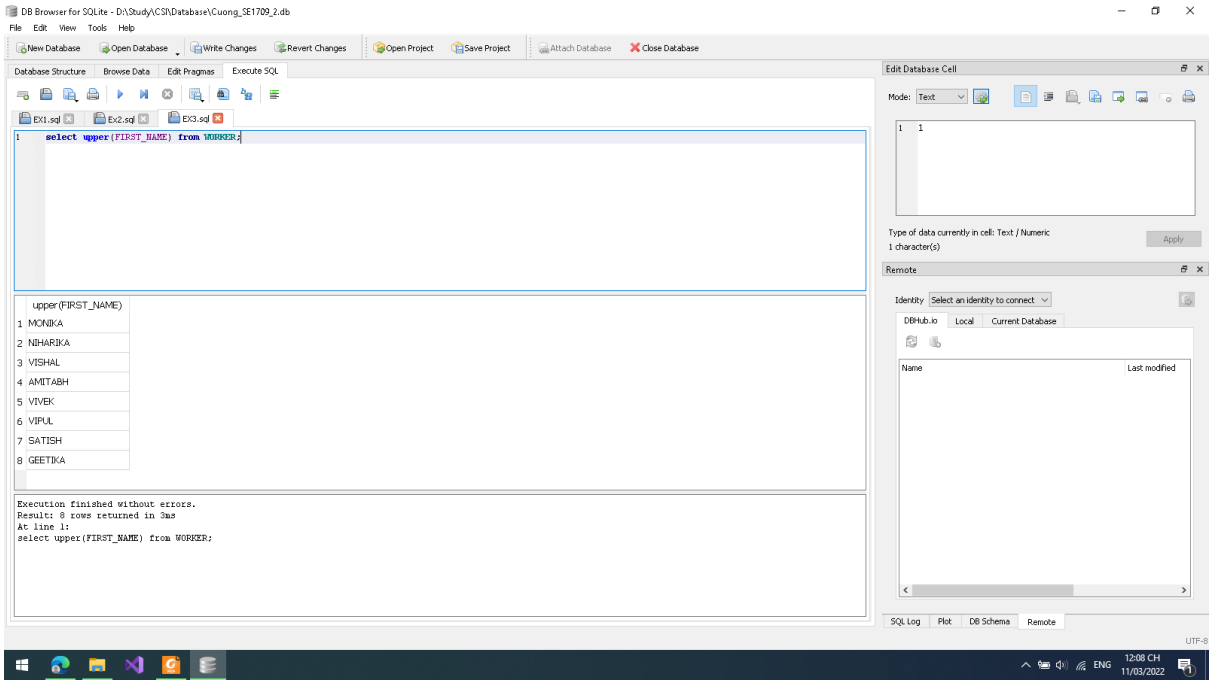


3.

Code:

```
select upper(FIRST_NAME) from WORKER;
```

Kết quả:

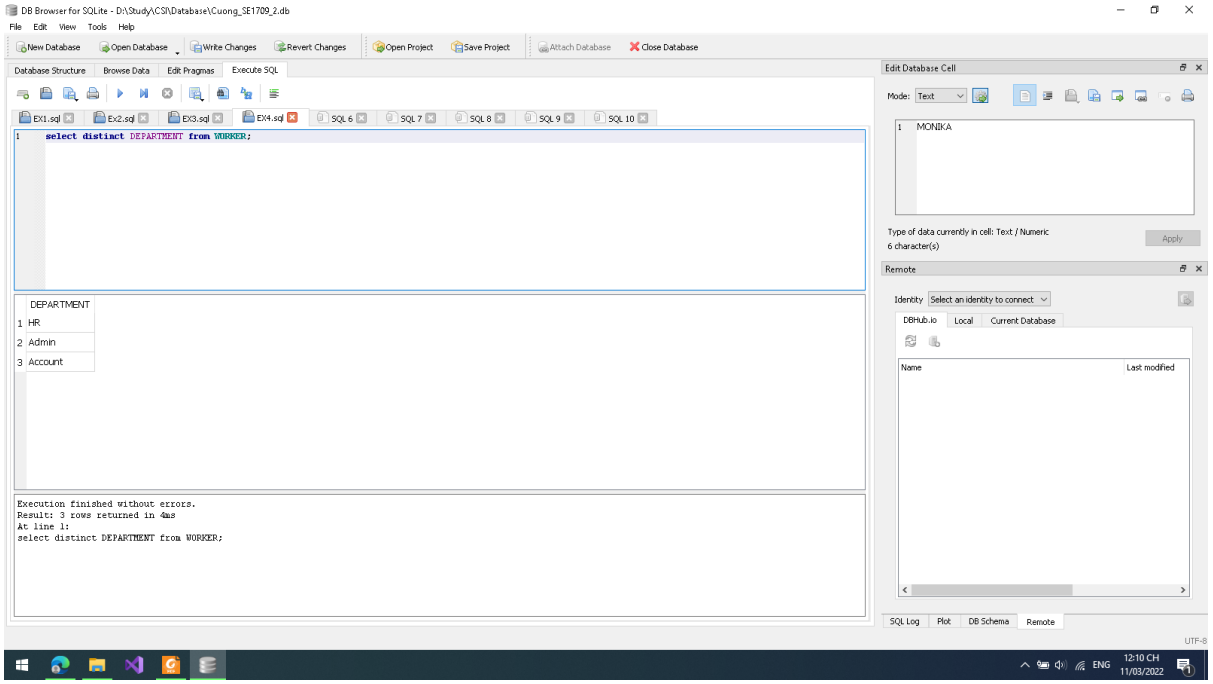


4.

Code:

```
select distinct DEPARTMENT from WORKER;
```

Kết quả:

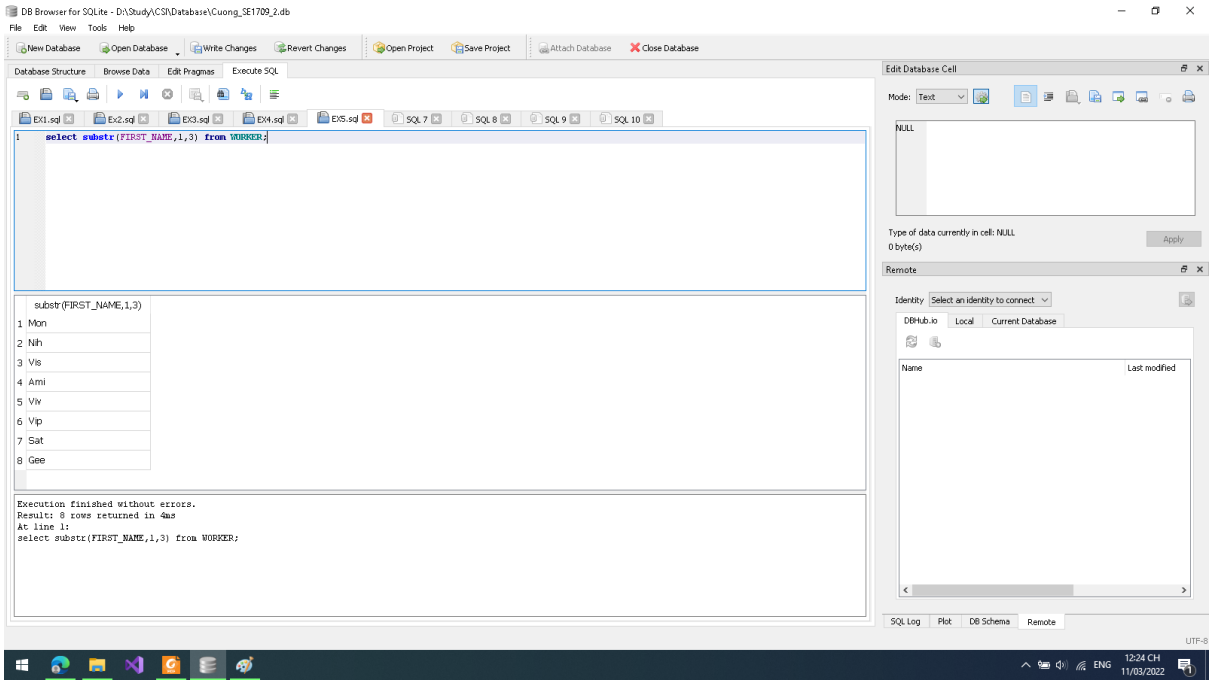


5.

Code:

```
select substr(FIRST_NAME,1,3) from WORKER;
```

Kết quả:

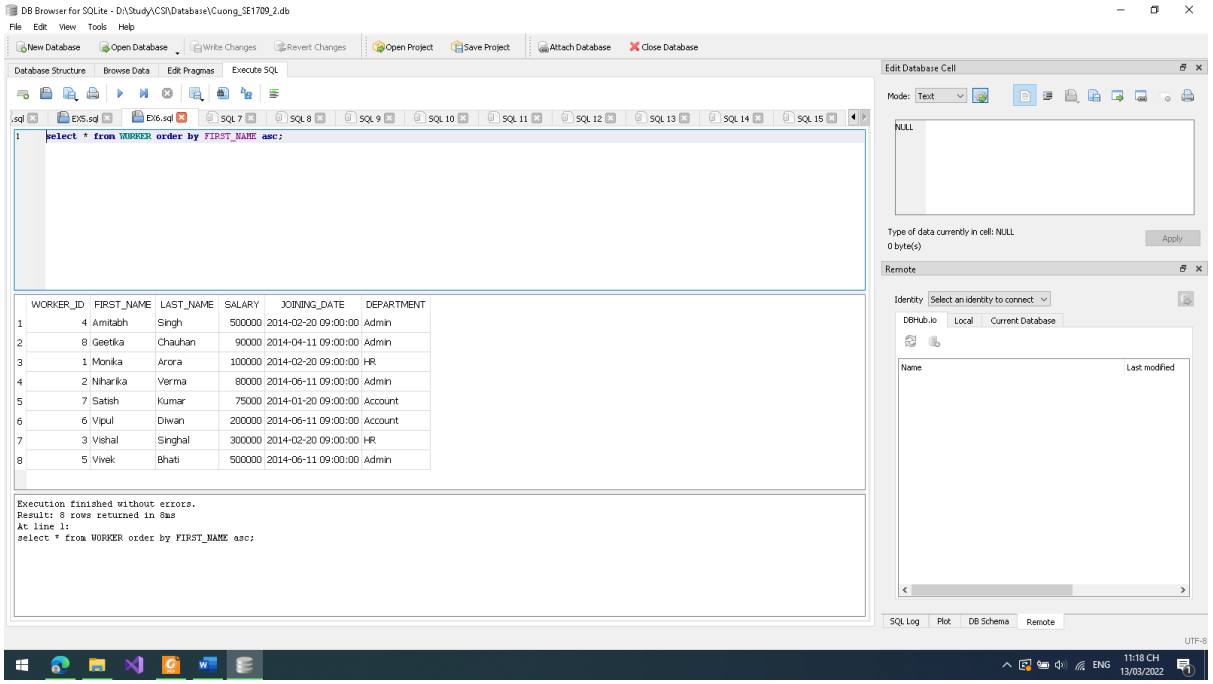


6.

Code:

```
select * from WORKER order by FIRST_NAME asc;
```

Kết quả:

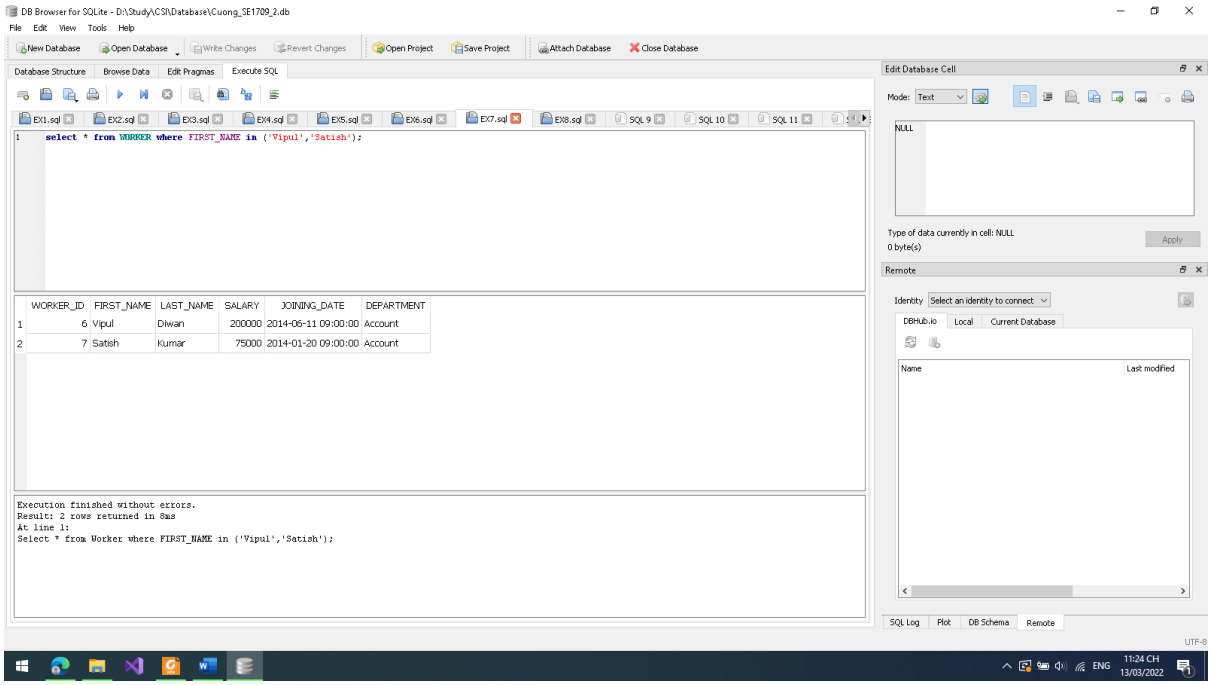


7.

Code:

```
select * from WORKER where FIRST_NAME in ('Vipul','Satish');
```

Kết quả:

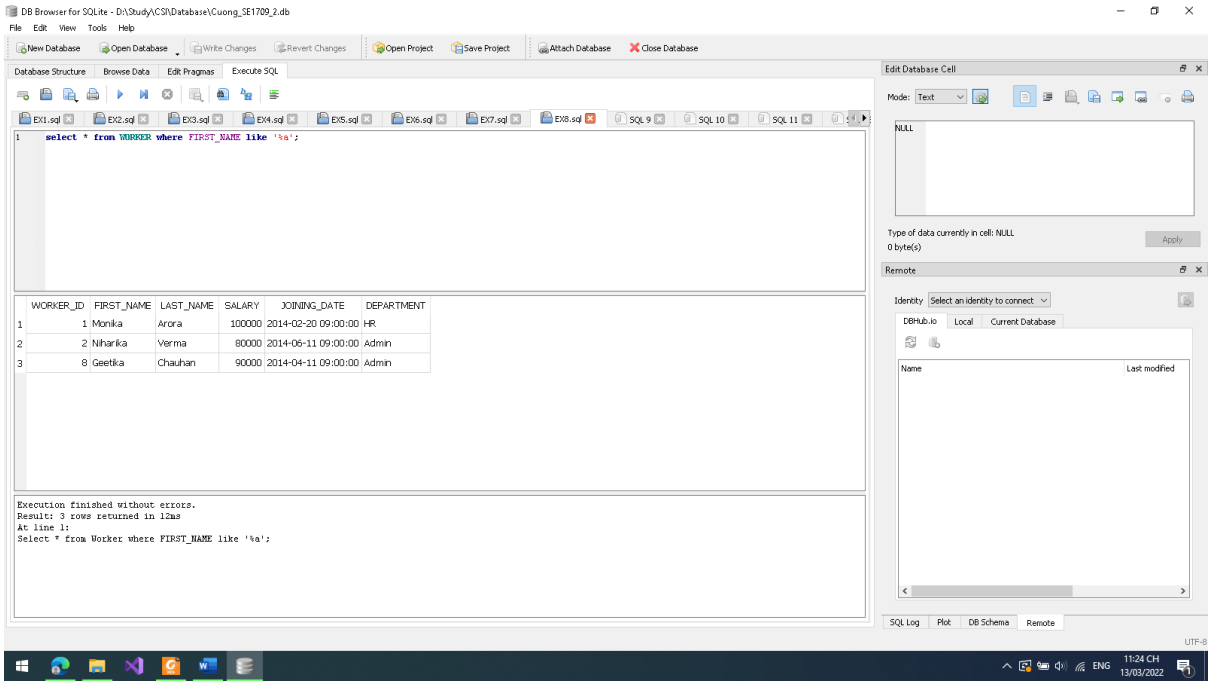


8.

Code:

```
select * from WORKER where FIRST_NAME like '%a';
```

Kết quả:

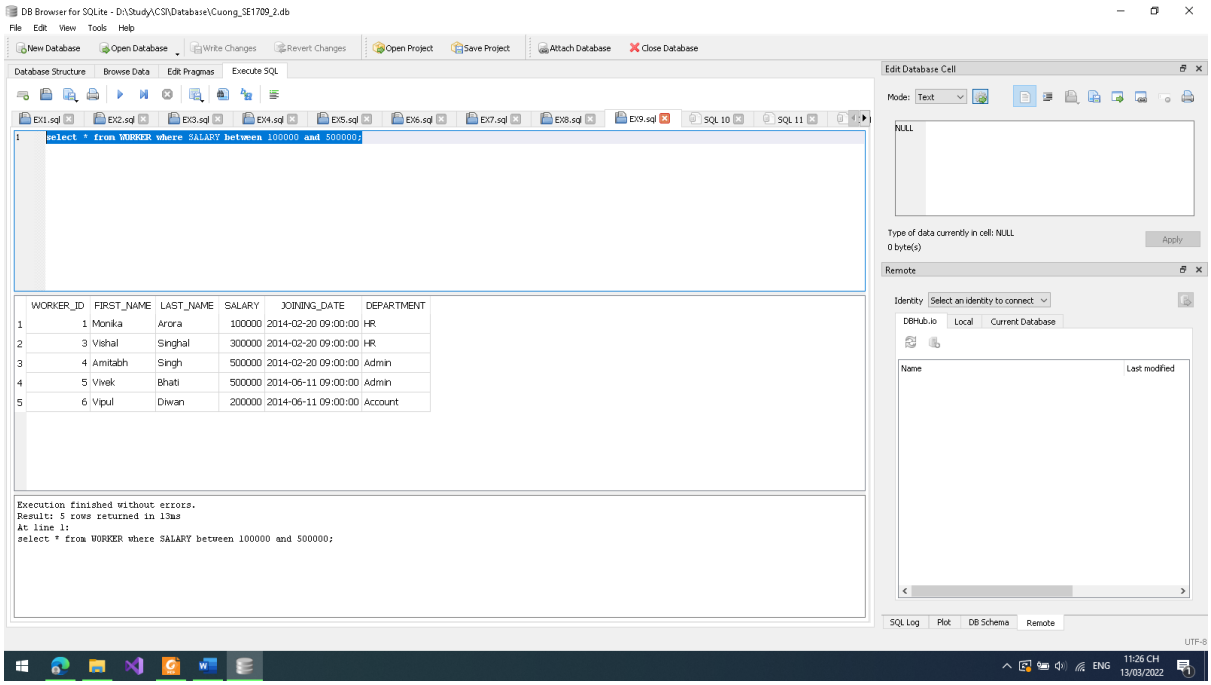


9.

Code:

```
select * from WORKER where SALARY between 100000 and 500000;
```

Kết quả:

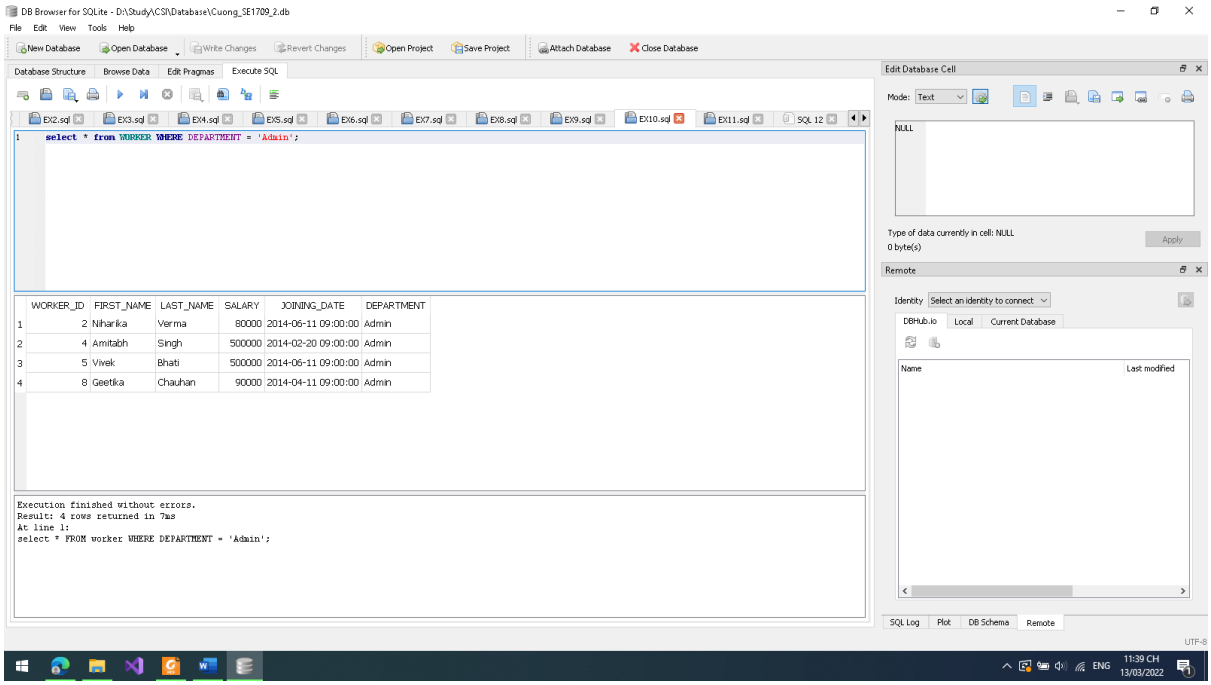


10.

Code:

```
select * from WORKER WHERE DEPARTMENT = 'Admin';
```

Kết quả:



11.

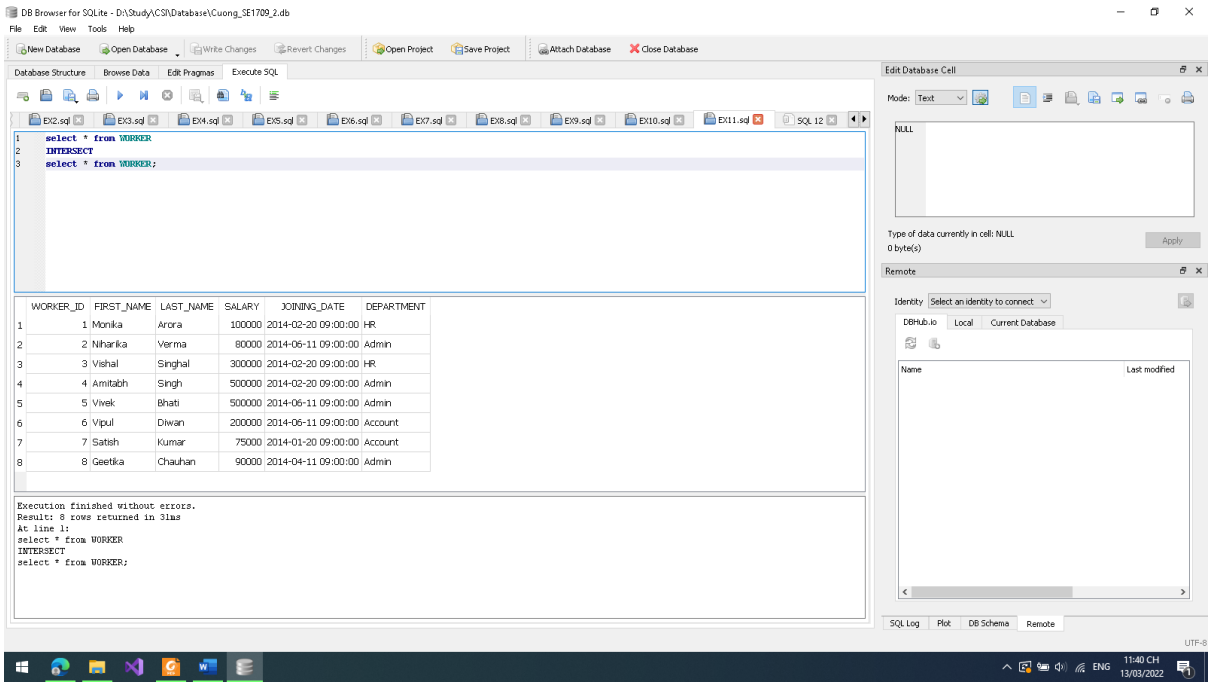
Code:

select * from WORKER

INTERSECT

select * from WORKER;

Kết quả:

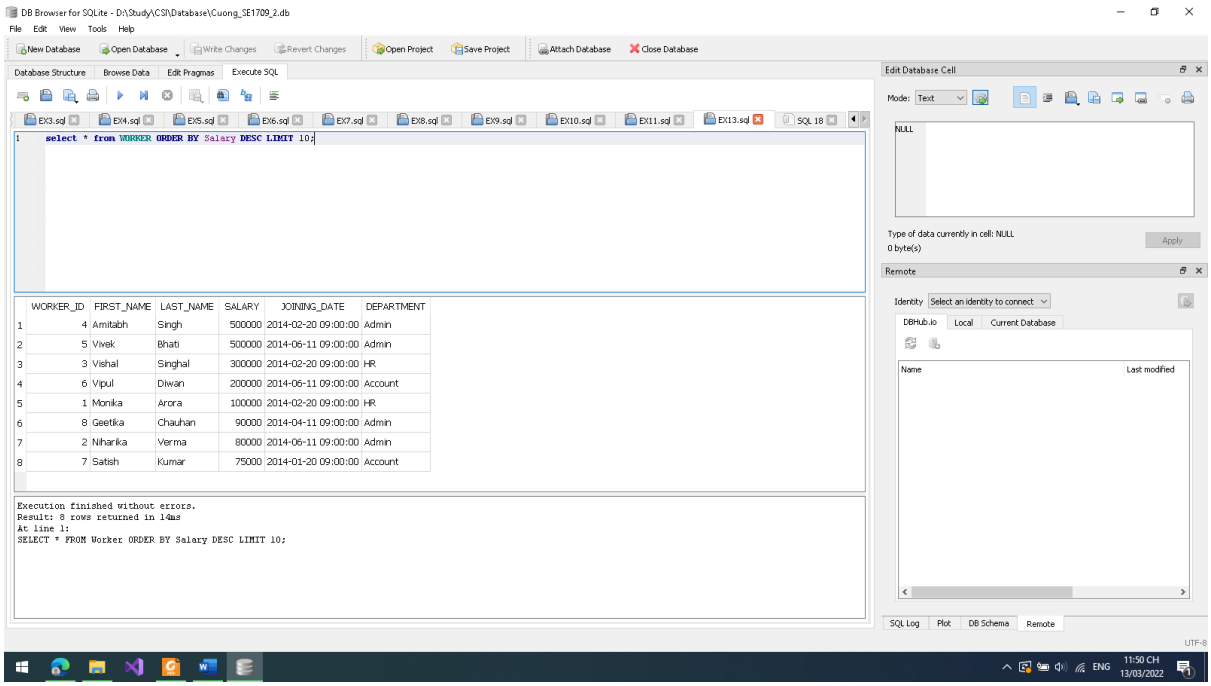


13.

Code:

select * from Worker ORDER BY Salary DESC LIMIT 10;

Kết quả:

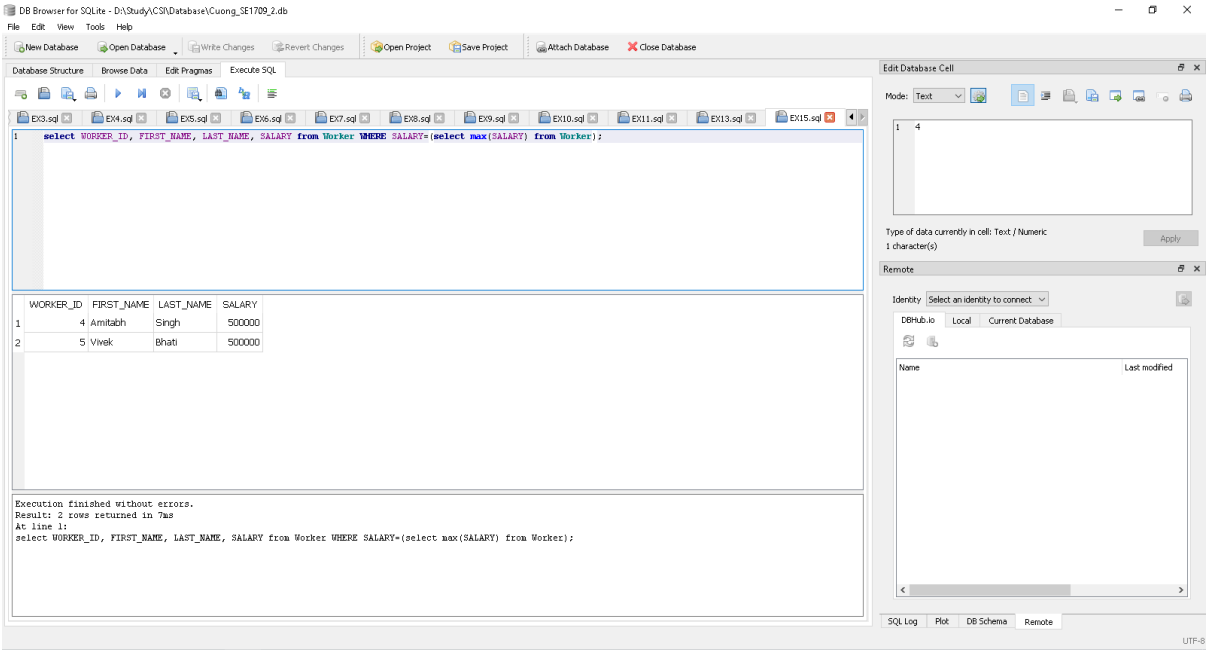


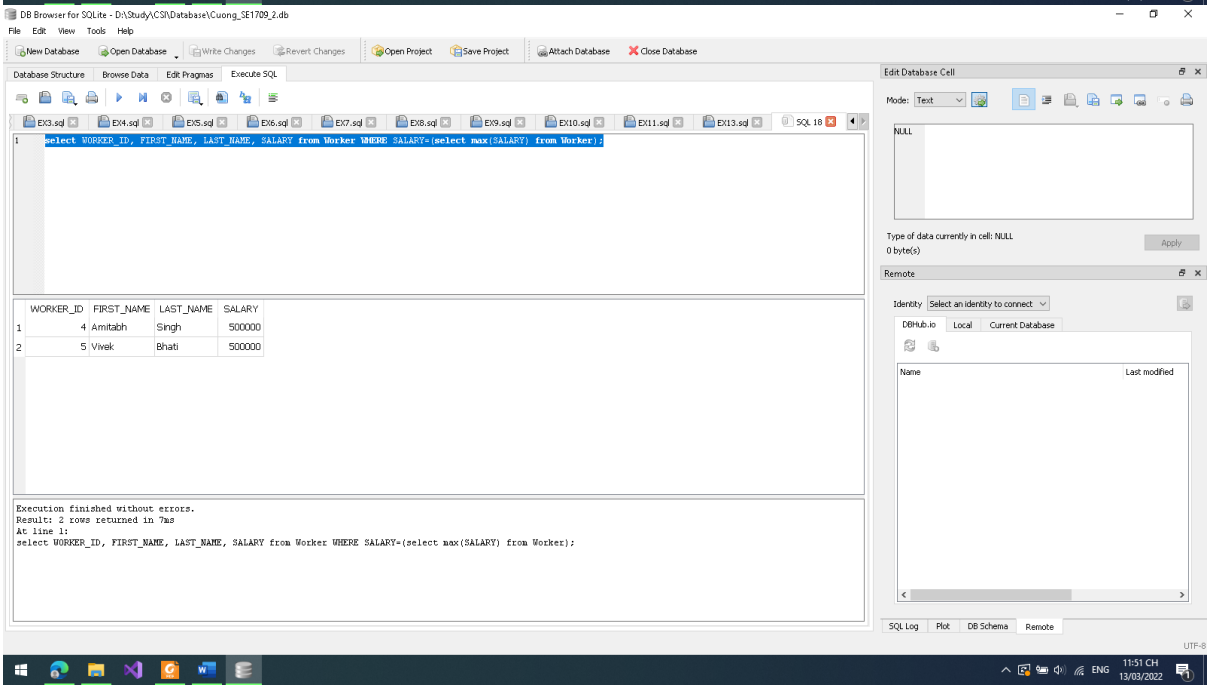
15.

Code:

select WORKER_ID, FIRST_NAME, LAST_NAME, SALARY from Worker WHERE SALARY=(select max(SALARY) from Worker);

Kết quả:


DB Browser for SQLite - D:\Study\CSI\Database\Cuong_SE1709_2.db
File Edit View Tools Help
New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database
Database Structure Browse Data Edit Pragmas Execute SQL
EX3.sql EX4.sql EX5.sql EX6.sql EX7.sql EX8.sql EX9.sql EX10.sql EX11.sql EX13.sql EX15.sql
1 select WORKER_ID, FIRST_NAME, LAST_NAME, SALARY from Worker WHERE SALARY=(select max(SALARY) from Worker);
WORKER_ID FIRST_NAME LAST_NAME SALARY
1 4 Amitabh Singh 500000
2 5 Vivek Bhati 500000
Execution finished without errors.
Result: 2 rows returned in 7ms
At line 1:
select WORKER_ID, FIRST_NAME, LAST_NAME, SALARY from Worker WHERE SALARY=(select max(SALARY) from Worker);
Edit Database Cell
Mode: Text
1 4
Type of data currently in cell: Text / Numeric
1 character(s)
Apply
Remote
Identity Select an identity to connect
DBHub.io Local Current Database
Name Last modified
SQL Log Plot DB Schema Remote
UTF-8
ENG 11:52 CH 13/03/2022


DB Browser for SQLite - D:\Study\CSI\Database\Cuong_SE1709_2.db
File Edit View Tools Help
New Database Open Database Write Changes Revert Changes Open Project Save Project Attach Database Close Database
Database Structure Browse Data Edit Pragmas Execute SQL
EX3.sql EX4.sql EX5.sql EX6.sql EX7.sql EX8.sql EX9.sql EX10.sql EX11.sql EX13.sql SQL 18
1 select WORKER_ID, FIRST_NAME, LAST_NAME, SALARY from Worker WHERE SALARY=(select max(SALARY) from Worker);
WORKER_ID FIRST_NAME LAST_NAME SALARY
1 4 Amitabh Singh 500000
2 5 Vivek Bhati 500000
Execution finished without errors.
Result: 2 rows returned in 7ms
At line 1:
select WORKER_ID, FIRST_NAME, LAST_NAME, SALARY from Worker WHERE SALARY=(select max(SALARY) from Worker);
Edit Database Cell
Mode: Text
NULL
Type of data currently in cell: NULL
0 byte(s)
Apply
Remote
Identity Select an identity to connect
DBHub.io Local Current Database
Name Last modified
SQL Log Plot DB Schema Remote
UTF-8
ENG 11:51 CH 13/03/2022