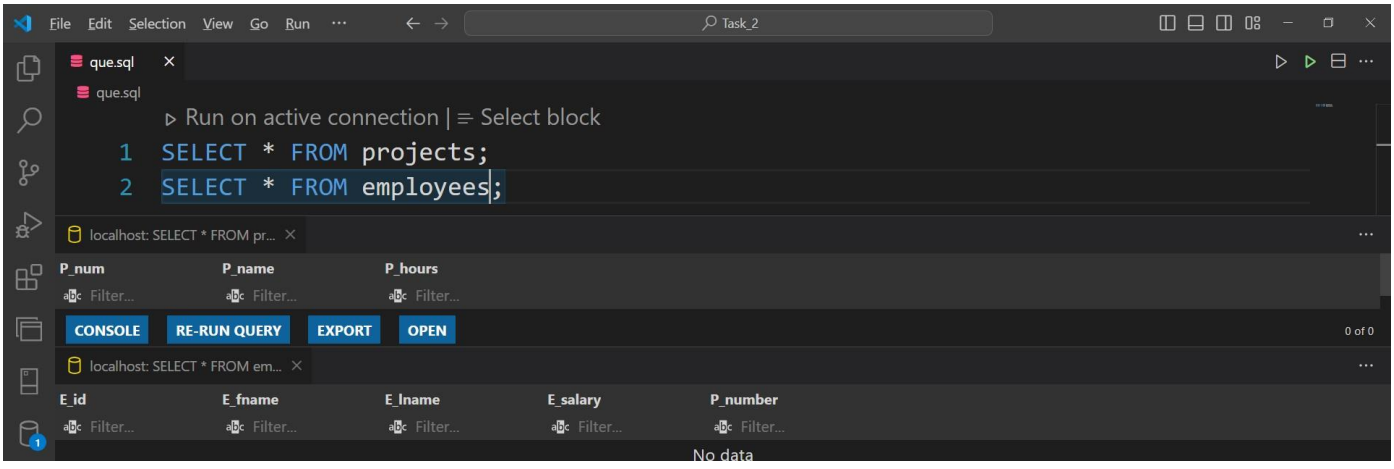
Task 2

1. Create Employees and Projects tables with the following constraint: (E_fname ,E_salary,P_name must be entered from user, E_salary must be greater than 2500, p_hours must be greater than 25).

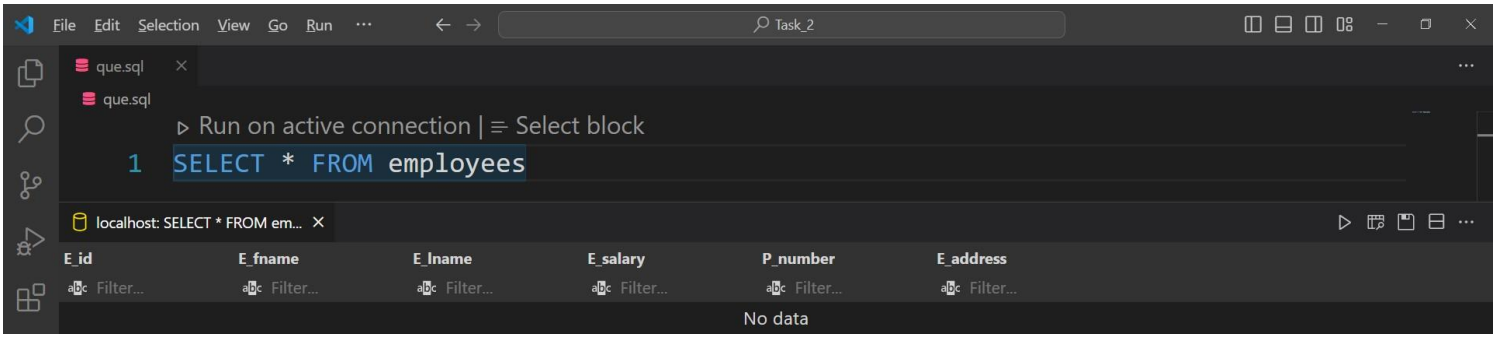
```sql
CREATE TABLE Projects
(
    P_num INT PRIMARY KEY ,
    P_name VARCHAR(100) NOT NULL,
    P_hours INT,
    CHECK (P_hours > 25)
);
CREATE TABLE Employees
(
    E_id INT PRIMARY KEY AUTO_INCREMENT,
    E_fname VARCHAR(50) NOT NULL,
    E_lname VARCHAR(50),
    E_salary INT NOT NULL,
    P_number int,
    FOREIGN KEY (P_number) REFERENCES Projects(P_num),
    CHECK (E_salary > 2500),

);
```



2. Add E_address column to employee table that must be only cairo, giza, and helwan,

```sql
ALTER TABLE employees
ADD E_address ENUM('cairo', 'giza', 'helwan')
```



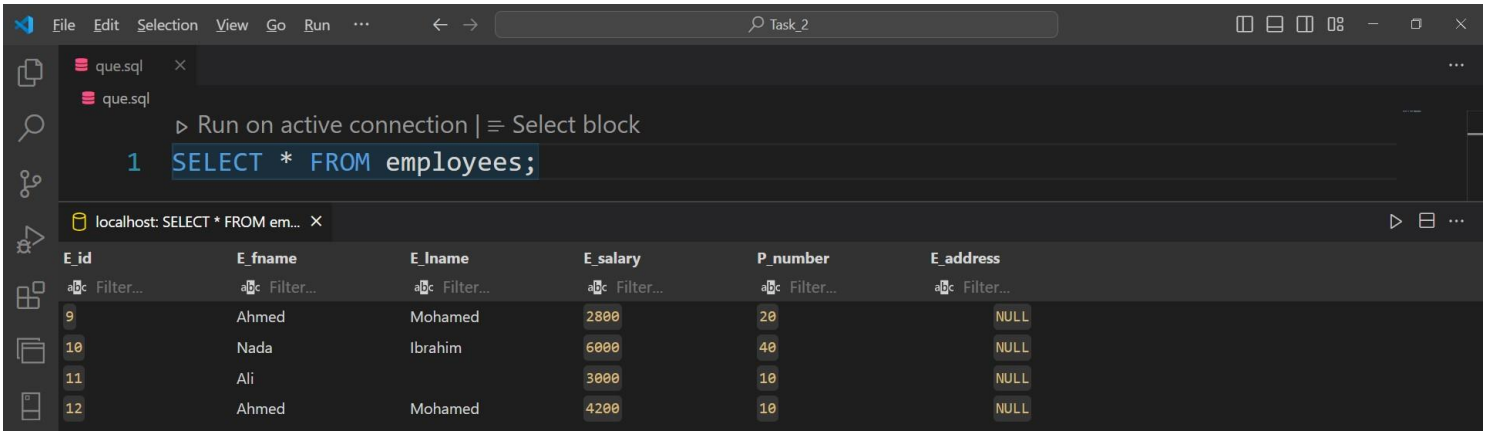
3. Insert values into two tables.

```sql
INSERT INTO projects (P_num, P_name, P_hours)
VALUE
    (10, 'IT', 35),
    (20, 'C', 28),
    (30, 'Network', 26),
    (40, 'SQL Server', 30);
```

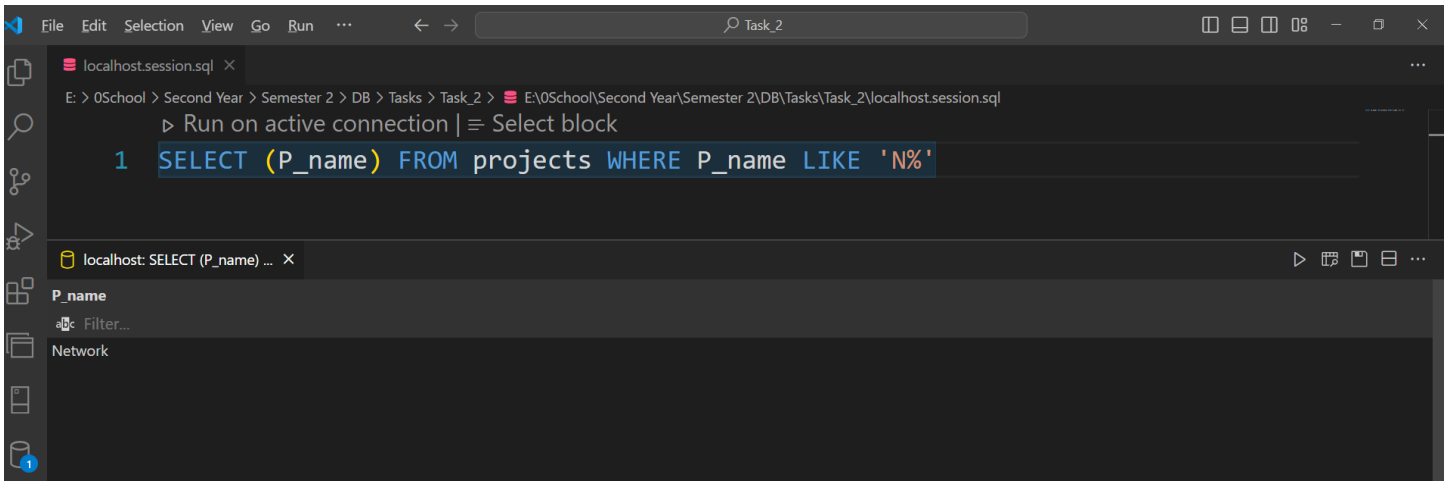
localhost: SELECT * FROM pr...

P_num	P_name	P_hours
10	IT	35
20	C	28
30	Network	26
40	SQL Server	30

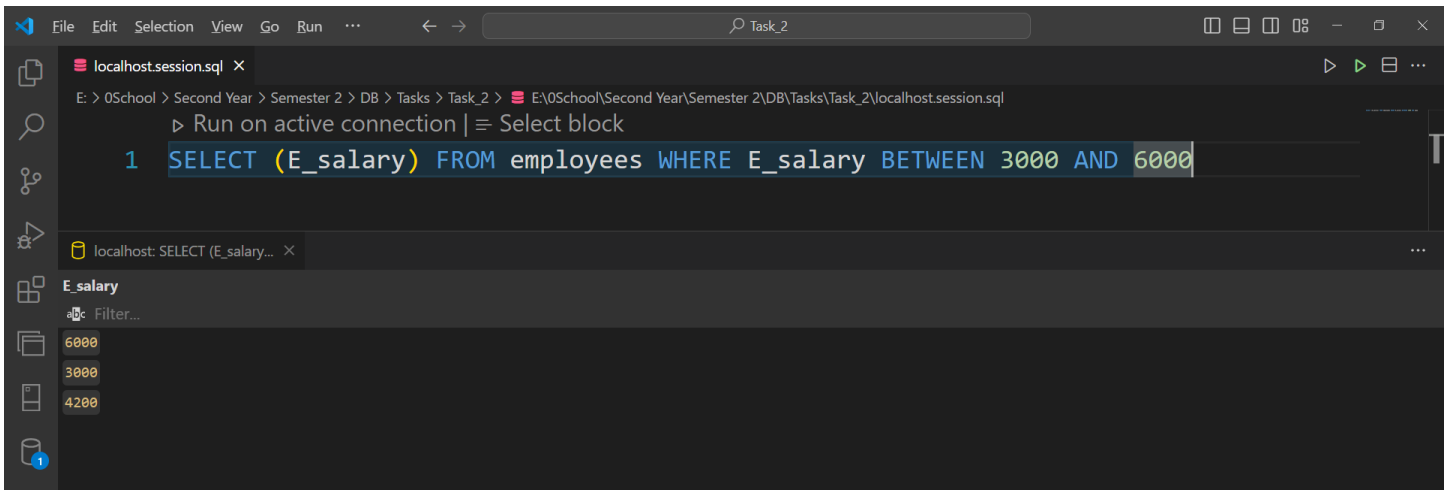
```sql
INSERT INTO employees(E_fname, E_lname, E_salary, P_Number)
VALUES
    ('Ahmed', 'Mohamed', 2800, 20),
    ('Nada', 'Ibrahim', 6000, 40),
    ('Ali', '', 3000, 10),
    ('Ahmed', 'Mohamed', 4200, 10);
```



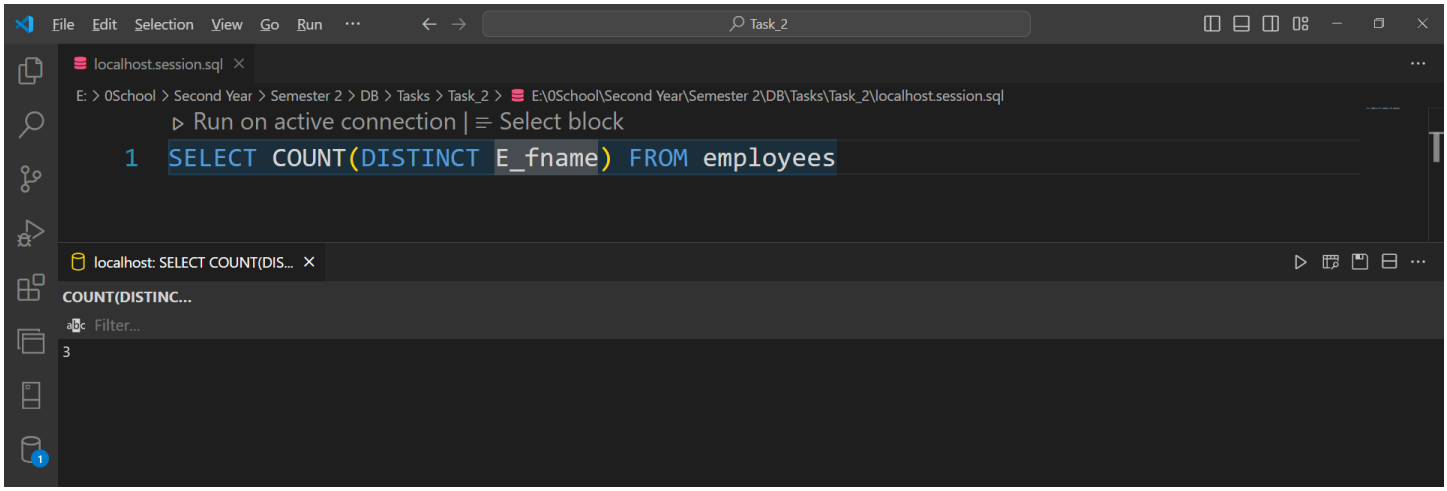
4. Select Project name start with N.



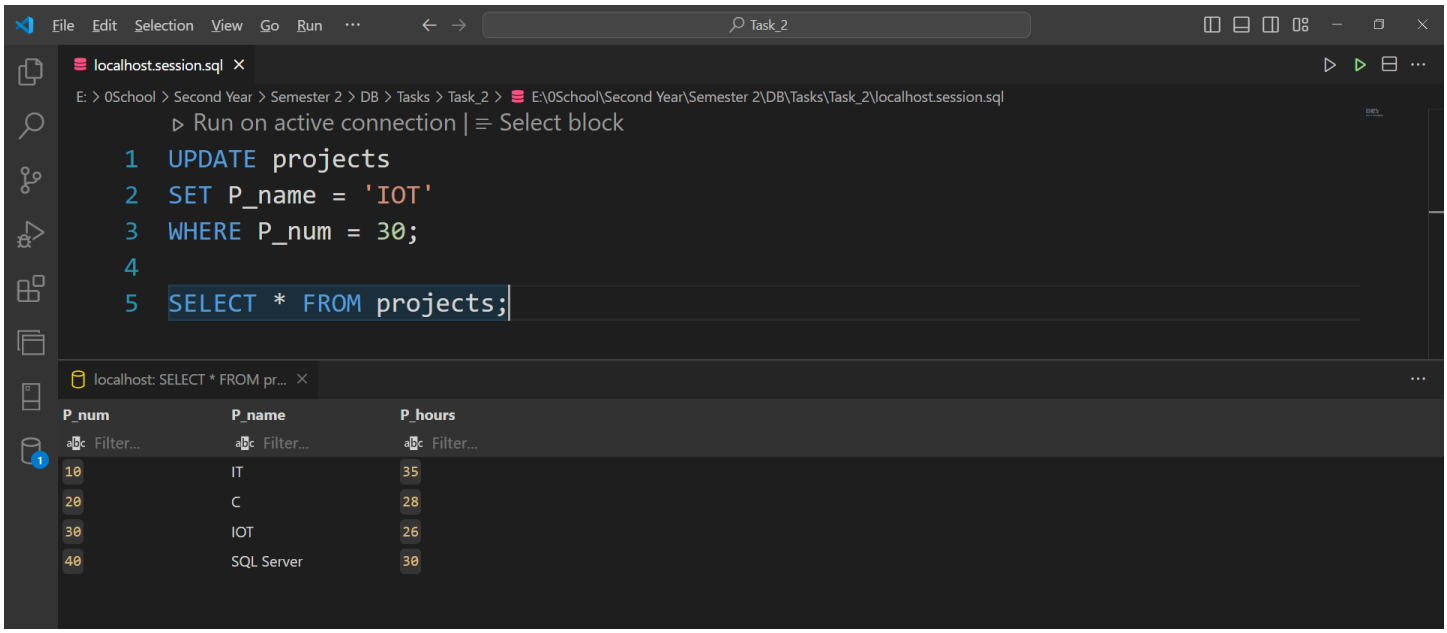
5. Select employee salary from 3000 to 6000.



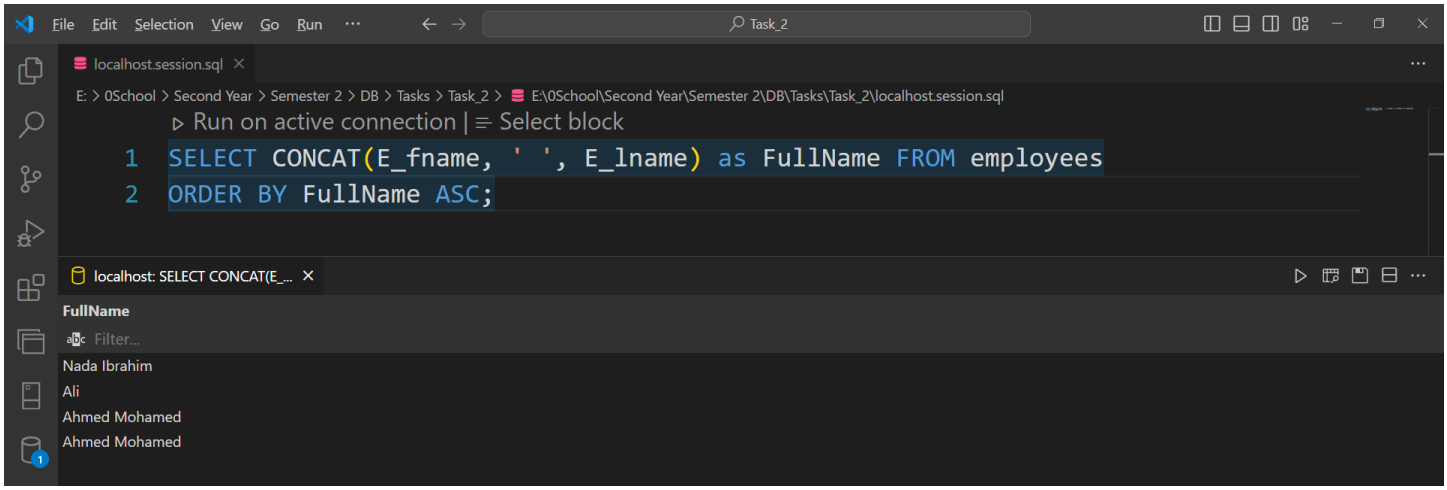
6. Select number of Employees without repeated name.

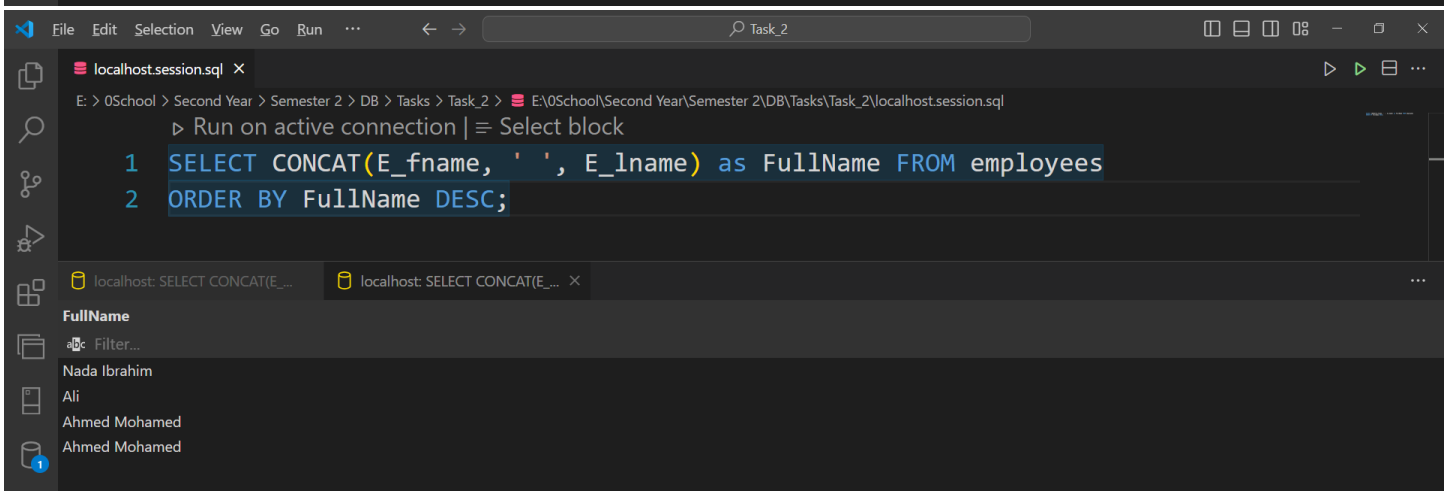


7. Set P_name = IOT with Project number 30.



8. Select full name of employees sorting then descending.





9. Select P_name of maximum hours and E_name that works on it.

```sql
SELECT P_name, P_hours, E_fname FROM employees
JOIN projects
ON employees.P_number = projects.P_num AND projects.P_hours = (SELECT max(projects.p_hours) FROM projects)
```