



SQLITE

228 SYBCA B

Nikunj Sadaliya

ASSIGNMENT I

ASSIGNMENT I TABLES:

I. DEPARTMENT 2. EMPLOYEE

```
CREATE TABLE employee(emp_no NUMBER(4), emp_name
VARCHAR(10), address VARCHAR(20), designation VARCHAR(9),
SAL NUMBER(7,2), dept_no NUMBER(2) references
department(dept_no));

INSERT INTO employee VALUES(101,'jeny','vapi','clerk',11000,1);
INSERT INTO employee
VALUES(102,"mahek","surat","teacher",7000,2);
INSERT INTO employee
VALUES(103,"yani","bharuch","lawyer",16000,3);
INSERT INTO employee VALUES(102,"mahi","nari","sales",5000,4);
INSERT INTO employee
VALUES(104,"demmi","mahesana","clerk",21000,5);
INSERT INTO employee
VALUES(801,"surbhi","ahemdabad","teacher",10000,6);
INSERT INTO employee
VALUES(106,"krinal","surat","lawyer",12000,7);
INSERT INTO employee
VALUES(108,"meera","vadodara","sales",11000,8);
INSERT INTO employee VALUES(102,"rummi","vapi","clerk",25000,9);
INSERT INTO employee
VALUES(110,"mr.sawant","surat","s.w",22000,10);

Select * from employee;
```

```
CREATE TABLE department(dept_no number(2) primary key,  
dept_name VARCHAR(50),  
location VARCHAR(100));
```

```
INSERT INTO department VALUES(1,'Finance','Surat');  
INSERT INTO department VALUES(2,'admin','vadodra');  
INSERT INTO department VALUES(3,'Computer','vapi');  
INSERT INTO department VALUES(4,'Marketing','vyara');  
INSERT INTO department VALUES(5,'IT','Bombay');  
INSERT INTO department VALUES(6,'admin','junagadh');  
INSERT INTO department VALUES(7,'HR','chennai');  
INSERT INTO department VALUES(8,'Finance','Bhavnagar');  
INSERT INTO department VALUES(9,'Computer','surat');  
INSERT INTO department VALUES(10,'IT','Kolakata');
```

```
Select * from department;
```

NIKUNJ SADALIYA

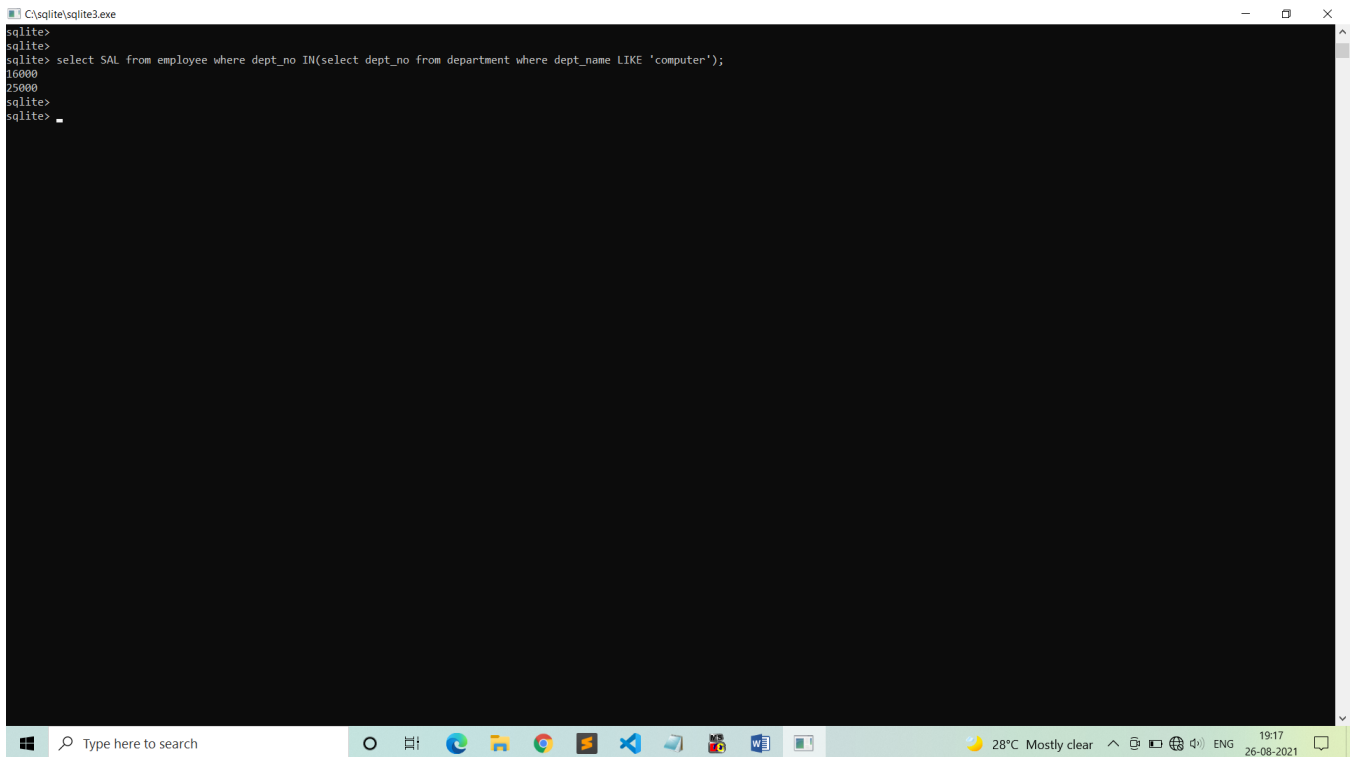
SQLite PROGRAM

```
C:\sqlite\sqlite3.exe
SQLite version 3.36.0 2021-06-18 18:36:39
Enter ".help" for usage hints.
Connected to a transient in-memory database.
Use ".open FILENAME" to reopen on a persistent database.
sqlite> CREATE TABLE employee(emp_no NUMBER(4),
...> emp_name VARCHAR(10),
...> address VARCHAR(20),
...> designation VARCHAR(9),
...> SAL NUMBER(7,2),
...> dept_no NUMBER(2) references department(dept_no));
sqlite>
sqlite> INSERT INTO employee VALUES(101,'jeny','vapi','clerk',11000,1);
sqlite> INSERT INTO employee VALUES(102,'mahek','surat','teacher',7000,2);
sqlite> INSERT INTO employee VALUES(103,'yani','bharuch','lawyer',16000,3);
sqlite> INSERT INTO employee VALUES(102,'mahi','nari','sales',5000,4);
sqlite> INSERT INTO employee VALUES(104,'demmi','mahesana','clerk',21000,5);
sqlite> INSERT INTO employee VALUES(801,'surbhi','ahemdabad','teacher',10000,6);
sqlite> INSERT INTO employee VALUES(106,'krinal','surat','lawyer',12000,7);
sqlite> INSERT INTO employee VALUES(108,'meera','vadodara','sales',11000,8);
sqlite> INSERT INTO employee VALUES(102,'rummi','vapi','clerk',25000,9);
sqlite> INSERT INTO employee VALUES(110,'mr.sawant','surat','s.w',22000,10);
sqlite>
sqlite> select * from employee;
101|jeny|vapi|clerk|11000|1
102|mahek|surat|teacher|7000|2
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
104|demmi|mahesana|clerk|21000|5
801|surbhi|ahemdabad|teacher|10000|6
106|krinal|surat|lawyer|12000|7
108|meera|vadodara|sales|11000|8
102|rummi|vapi|clerk|25000|9
110|mr.sawant|surat|s.w|22000|10
sqlite> .
```

```
C:\sqlite\sqlite3.exe
SQLite version 3.36.0 2021-06-18 18:36:39
Enter ".help" for usage hints.
Connected to a transient in-memory database.
Use ".open FILENAME" to reopen on a persistent database.
sqlite> CREATE TABLE department(dept_no number(2) primary key,
...> dept_name VARCHAR(50),
...> location VARCHAR(100));
sqlite>
sqlite> INSERT INTO department VALUES(1,'Finance','Surat');
sqlite> INSERT INTO department VALUES(2,'admin','vadodra');
sqlite> INSERT INTO department VALUES(3,'Computer','vapi');
sqlite> INSERT INTO department VALUES(4,'Marketing','vyara');
sqlite> INSERT INTO department VALUES(5,'IT','Bombay');
sqlite> INSERT INTO department VALUES(6,'admin','junagadh');
sqlite> INSERT INTO department VALUES(7,'HR','chennai');
sqlite> INSERT INTO department VALUES(8,'Finance','Bhavnagar');
sqlite> INSERT INTO department VALUES(9,'Computer','surat');
sqlite> INSERT INTO department VALUES(10,'IT','Kolkata');
sqlite>
sqlite> select * from department;
1|Finance|Surat
2|admin|vadodra
3|Computer|vapi
4|Marketing|vyara
5|IT|Bombay
6|admin|junagadh
7|HR|chennai
8|Finance|Bhavnagar
9|Computer|surat
10|IT|Kolkata
sqlite>
```

1. FIND TOTAL SALARY OF ALL COMPUTER DEPARTMENT EMPLOYEE

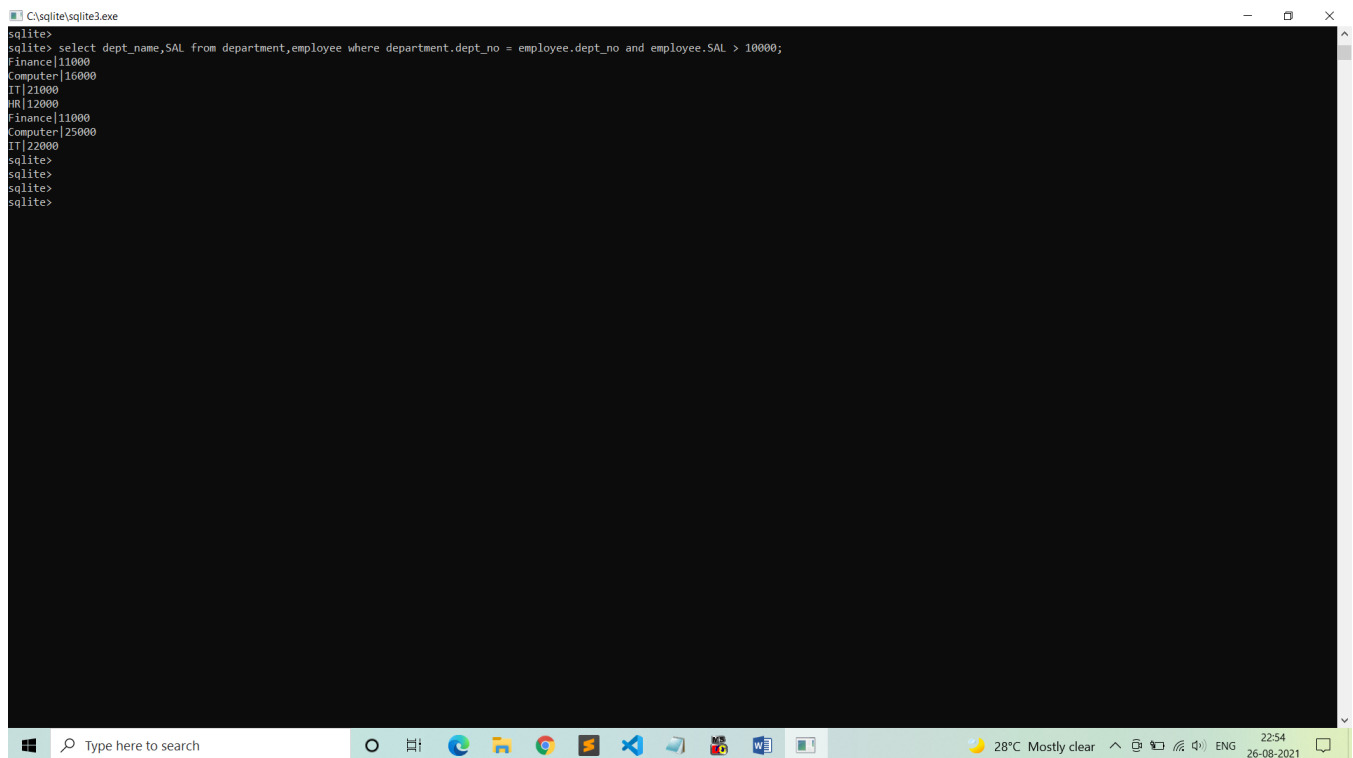
QUERY: select SAL from employee where dept_no IN(select dept_no from department where dept_name LIKE 'computer');



```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite> select SAL from employee where dept_no IN(select dept_no from department where dept_name LIKE 'computer');
16000
25000
sqlite>
sqlite>
```

2. FIND THE NAME OF DEPARTMENT WHOSE SALARY IS ABOVE IS 1000

QUERY: select dept_name,SAL from department,employee where department.dept_no = employee.dept_no and employee.SAL > 10000;



```
C:\sqlite\sqlite3.exe
sqlite>
sqlite> select dept_name,SAL from department,employee where department.dept_no = employee.dept_no and employee.SAL > 10000;
Finance|11000
Computer|16000
IT|21000
HR|12000
Finance|11000
Computer|25000
IT|22000
sqlite>
sqlite>
sqlite>
sqlite>
```

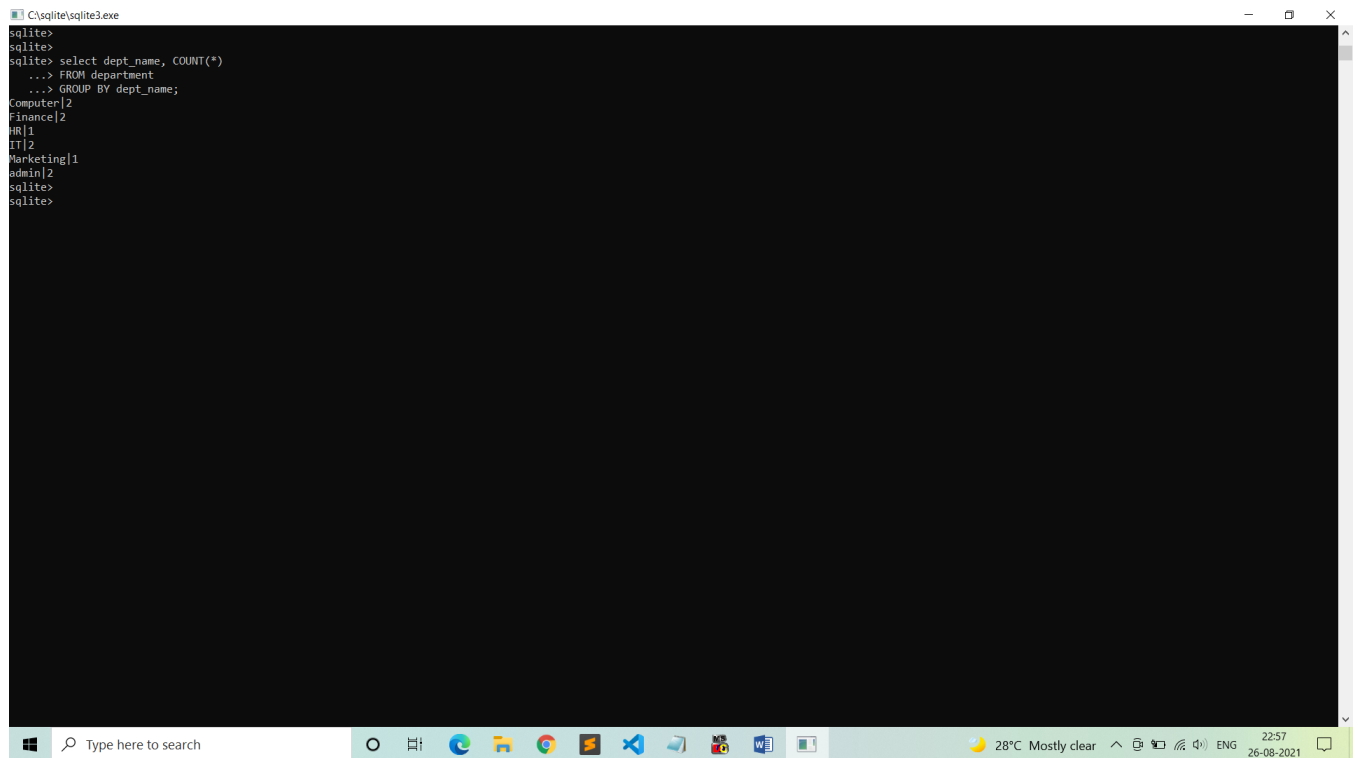
The screenshot shows a Windows taskbar at the bottom with the search bar and several application icons. The system tray on the right indicates a temperature of 28°C, mostly clear weather, and the date and time as 22:54 on 26-08-2021.

3. COUNT THE NUMBER OF EMPLOYEES IN EACH DEPARTMENT

QUERY: select dept_name, COUNT(*)

...> FROM department

...> GROUP BY dept_name;



The screenshot shows a Windows command prompt window titled "C:\sqlite\sqlite3.exe". The user has entered the following SQL query:

```
sqlite>
sqlite> select dept_name, COUNT(*)
...> FROM department
...> GROUP BY dept_name;
```

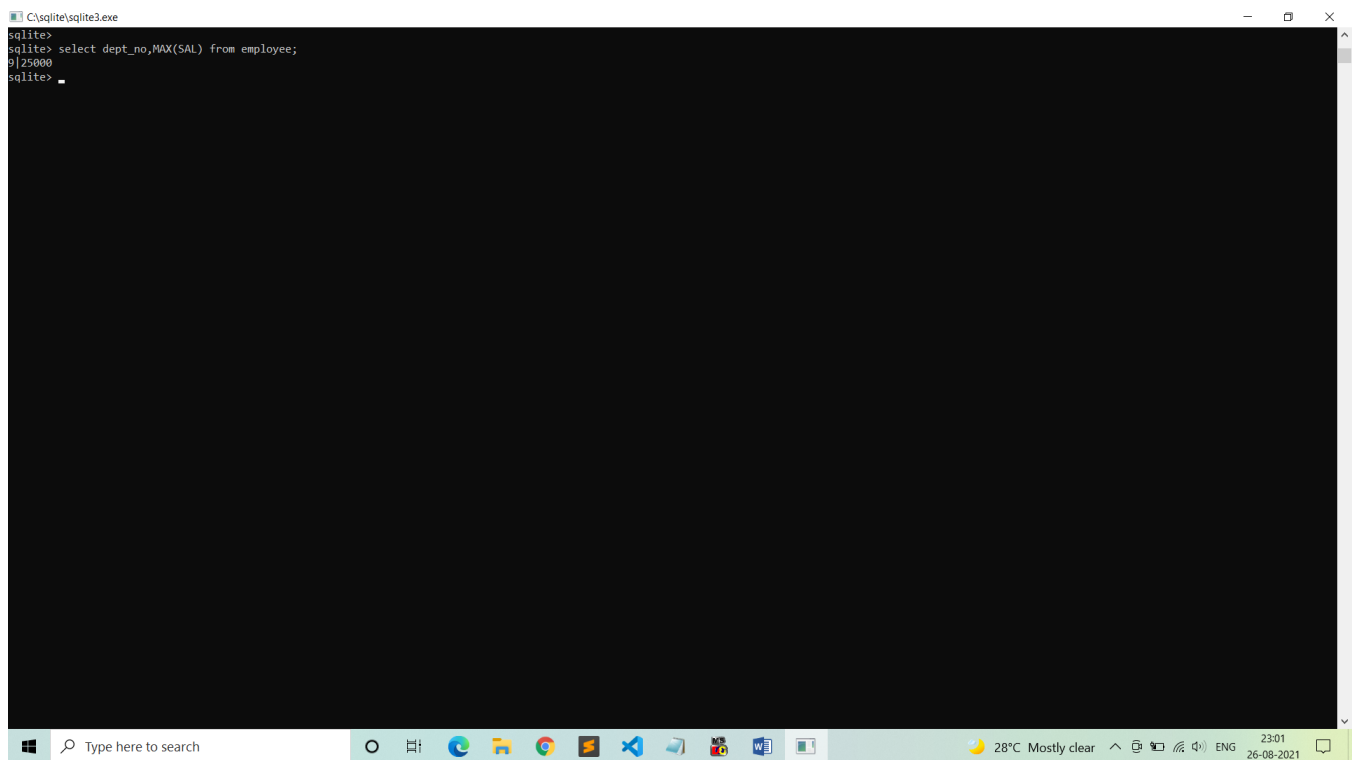
The output of the query is displayed as follows:

```
Computer|2
Finance|2
HR|1
IT|2
Marketing|1
admin|2
sqlite>
sqlite>
```

The taskbar at the bottom of the window shows the search bar, task view button, and several application icons. The system tray on the right indicates a temperature of 28°C, mostly clear weather, and the date and time as 22:57 on 26-08-2021.

4. DISPLAY THE MAXIMUM SALARY OF EACH DEPARTMENT

QUERY: select dept_no,MAX(SAL) from employee;



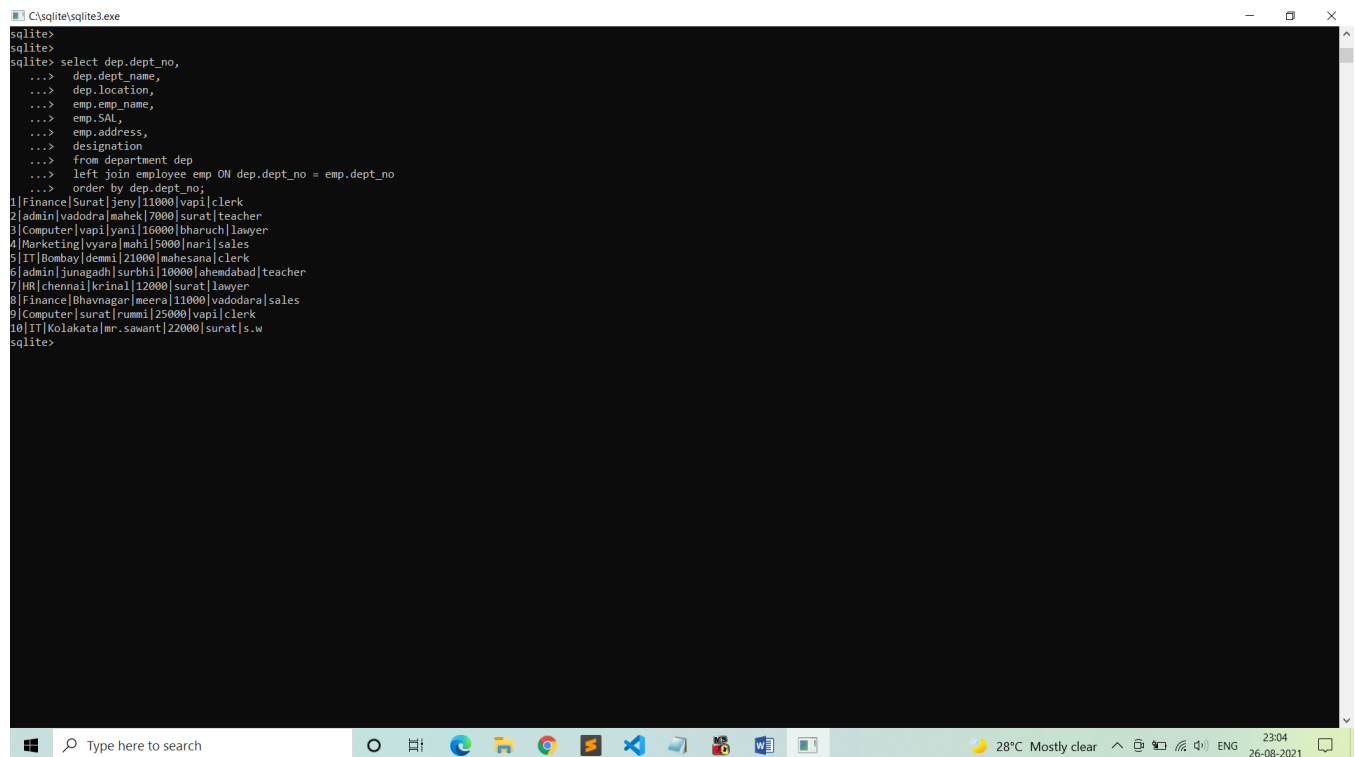
The screenshot shows a Windows desktop with a SQLite command prompt window open. The window title is "C:\sqlite\sqlite3.exe". The command prompt shows the following text:

```
sqlite>  
sqlite> select dept_no,MAX(SAL) from employee;  
9|25000  
sqlite> _
```

The Windows taskbar is visible at the bottom, showing the search bar, task view button, and several application icons. The system tray on the right shows the date and time as 23:01 on 26-08-2021, along with weather information (28°C Mostly clear) and system icons.

5. DISPLAY DEPARTMENT WISE EMPLOYEE LIST

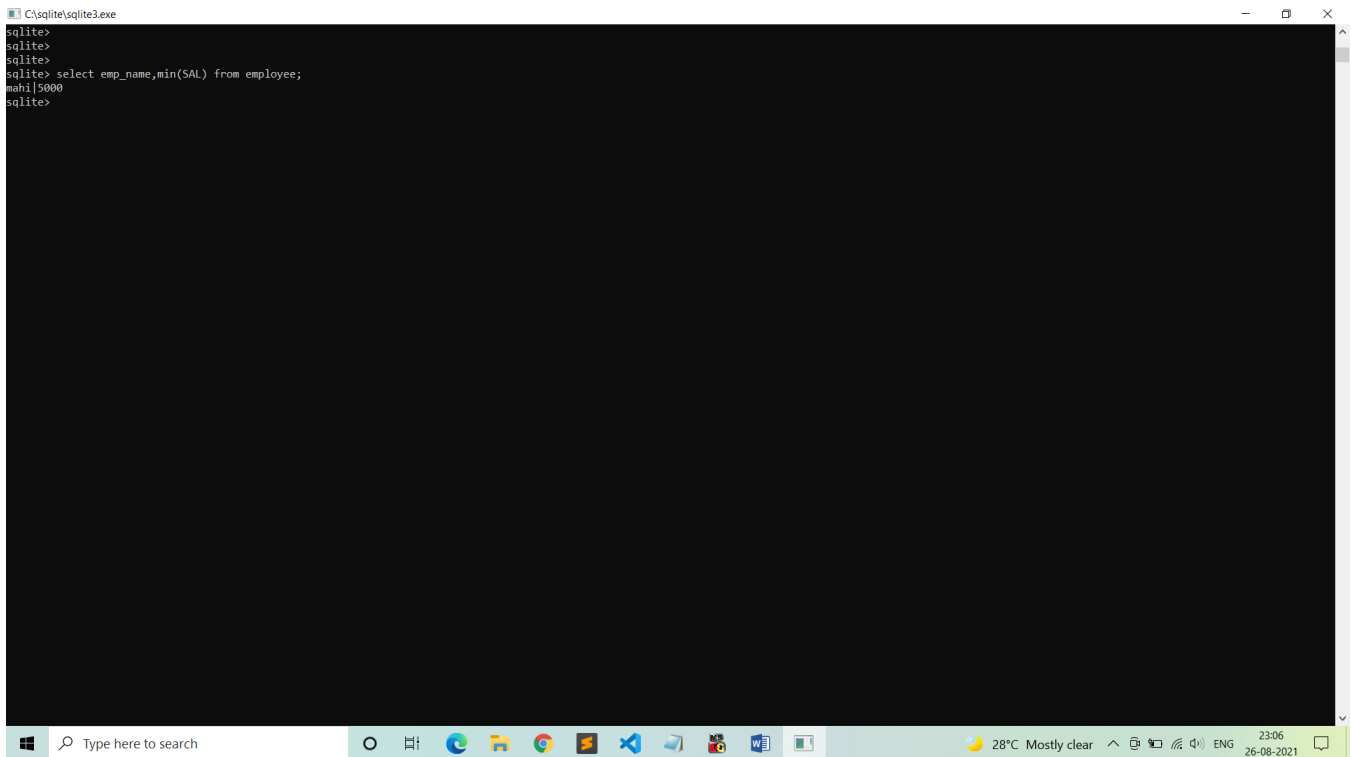
QUERY: select dep.dept_no, dep.dept_name, dep.location, emp.emp_name, emp.SAL, emp.address, designation from department dep left join employee emp ON dep.dept_no = emp.dept_no order by dep.dept_no;



```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite> select dep.dept_no,
...>   dep.dept_name,
...>   dep.location,
...>   emp.emp_name,
...>   emp.SAL,
...>   emp.address,
...>   designation
...> from department dep
...> left join employee emp ON dep.dept_no = emp.dept_no
...> order by dep.dept_no;
1|Finance|Surat|jeny|11000|vapi|clerk
2|admin|vadodra|mahek|7000|surat|teacher
3|Computer|vapilyani|16000|bharuch|lawyer
4|Marketing|vyara|mahil|5000|nari|sales
5|IT|Bombay|demmi|21000|mahesana|clerk
6|admin|junagadh|surbhi|10000|ahemdabad|teacher
7|HR|chennai|krinal|12000|surat|lawyer
8|Finance|Bhavnagar|meera|11000|vadodara|sales
9|Computer|surat|rummi|25000|vapi|clerk
10|IT|Kolakata|mr.sawant|22000|surat|s.w
sqlite>
```

6. DISPLAY THE NAME OF EMPLOYEE WHO HAS MINIMUM SALARY

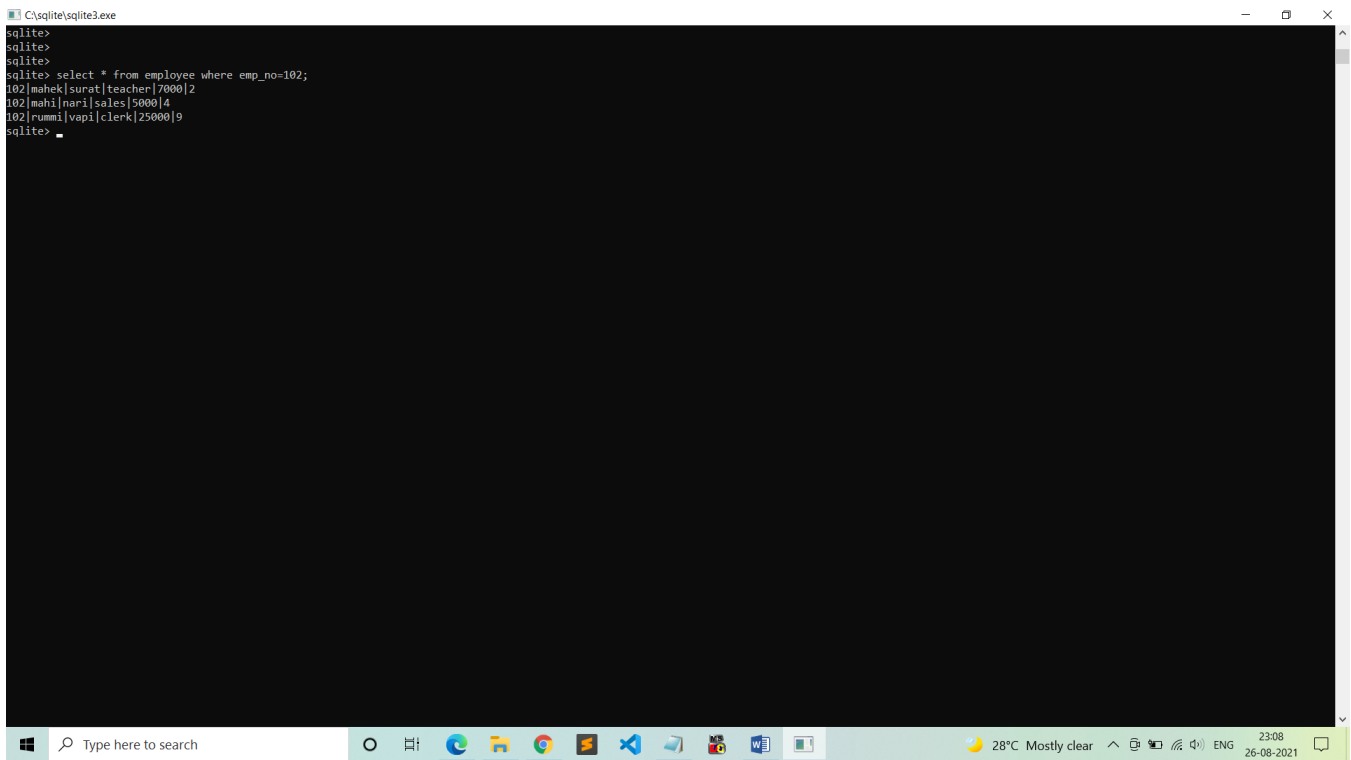
QUERY: select emp_name,min(SAL) from employee;



```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite> select emp_name,min(SAL) from employee;
mah15000
sqlite>
```

7. DISPLAY ALL THE DETAILS OF EMPLOYEE ID 102

QUERY: select * from employee where emp_no=102;

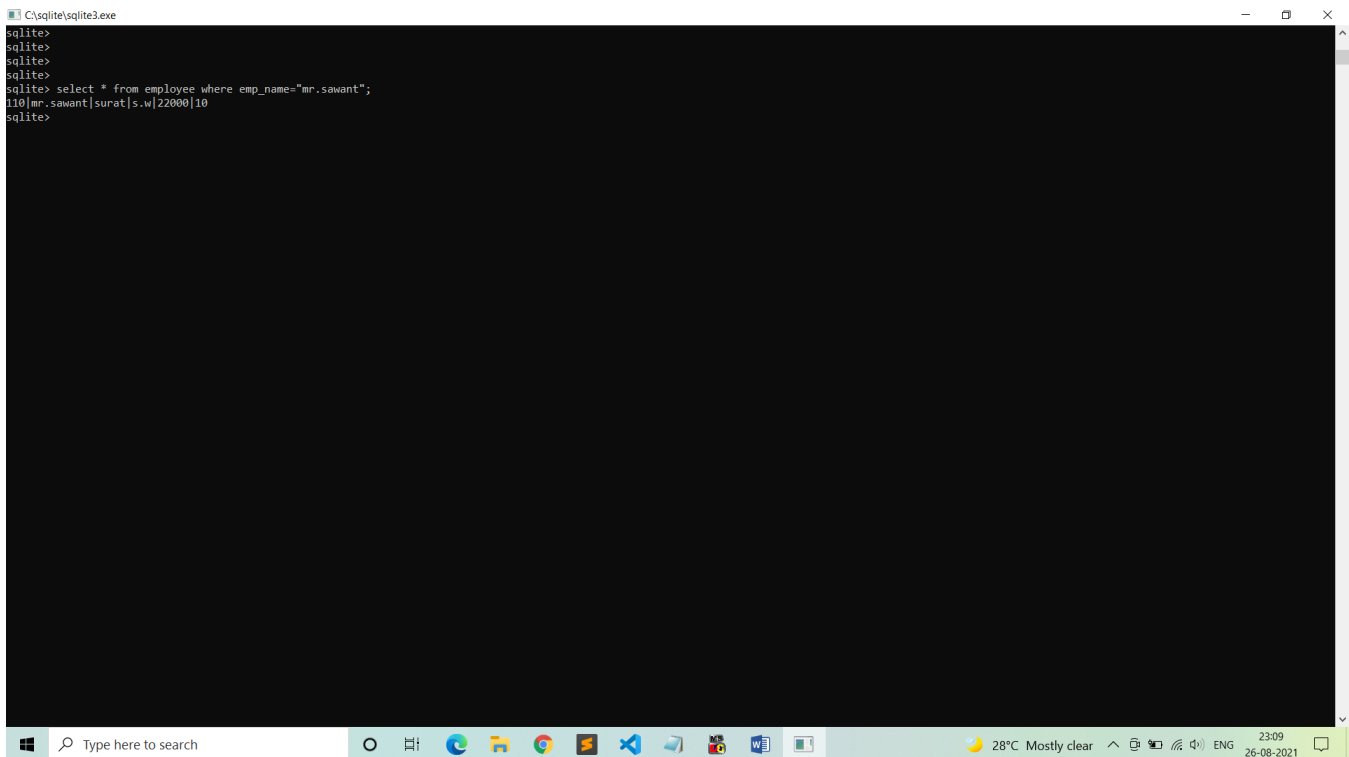


```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite> select * from employee where emp_no=102;
102|mahek|surat|teacher|7000|2
102|mahil|nari|sales|5000|4
102|rummi|vapi|clerk|25000|9
sqlite>
```

The screenshot shows a Windows command prompt window titled "C:\sqlite\sqlite3.exe". The prompt is "sqlite>". The user enters "sqlite>" three times. Then, the user enters the query "sqlite> select * from employee where emp_no=102;". The output shows three rows of data for employee ID 102: "102|mahek|surat|teacher|7000|2", "102|mahil|nari|sales|5000|4", and "102|rummi|vapi|clerk|25000|9". The prompt returns to "sqlite>". The Windows taskbar is visible at the bottom, showing the search bar, task view, and several application icons. The system tray shows the date and time as "23:08 26-08-2021".

8. DISPLAY ALL THE DETAILS OF MR. SAWANT

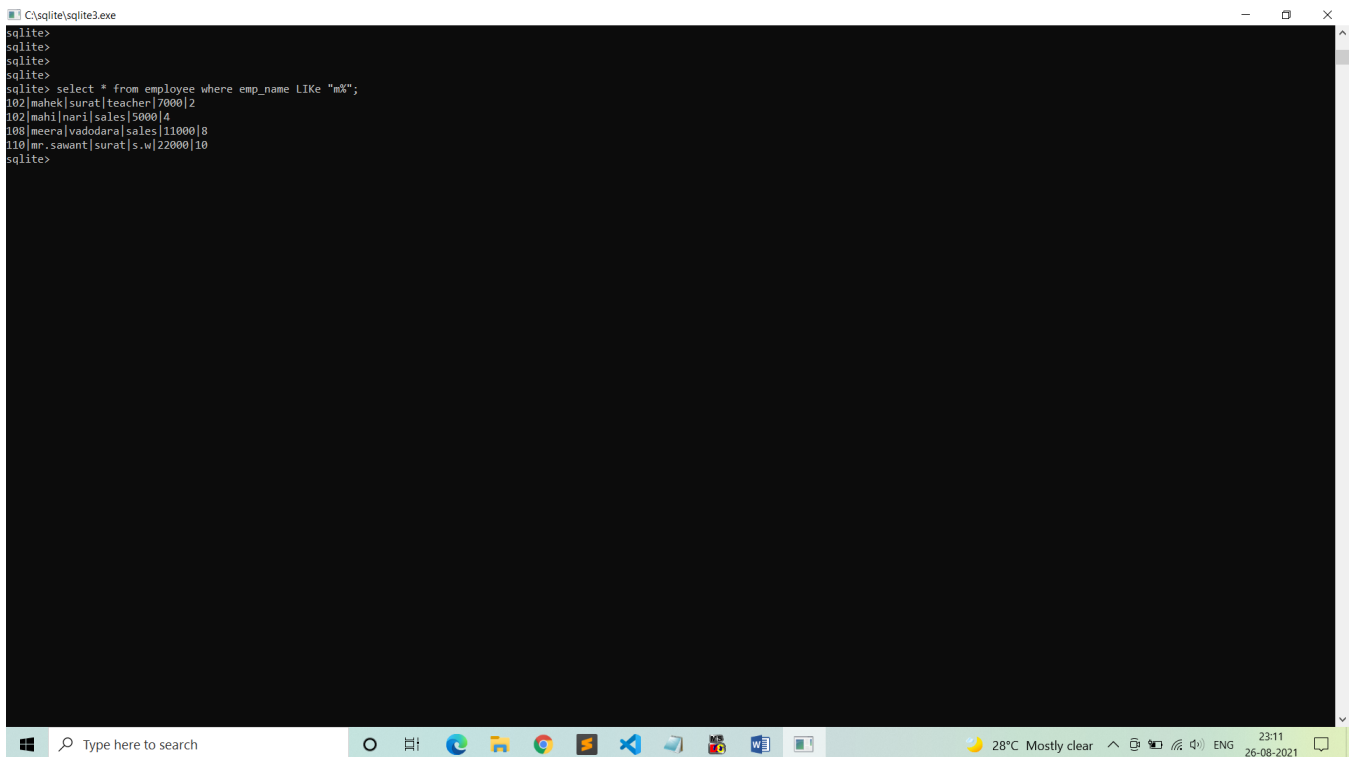
QUERY: select * from employee where emp_name="mr.sawant";



```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite> select * from employee where emp_name="mr.sawant";
110|mr.sawant|surat|s.w|22000|10
sqlite>
```

9. DISPLAY EMPLOYEES WHOSE NAME START WITH 'M'

QUERY: select * from employee where emp_name LIKE "m%";

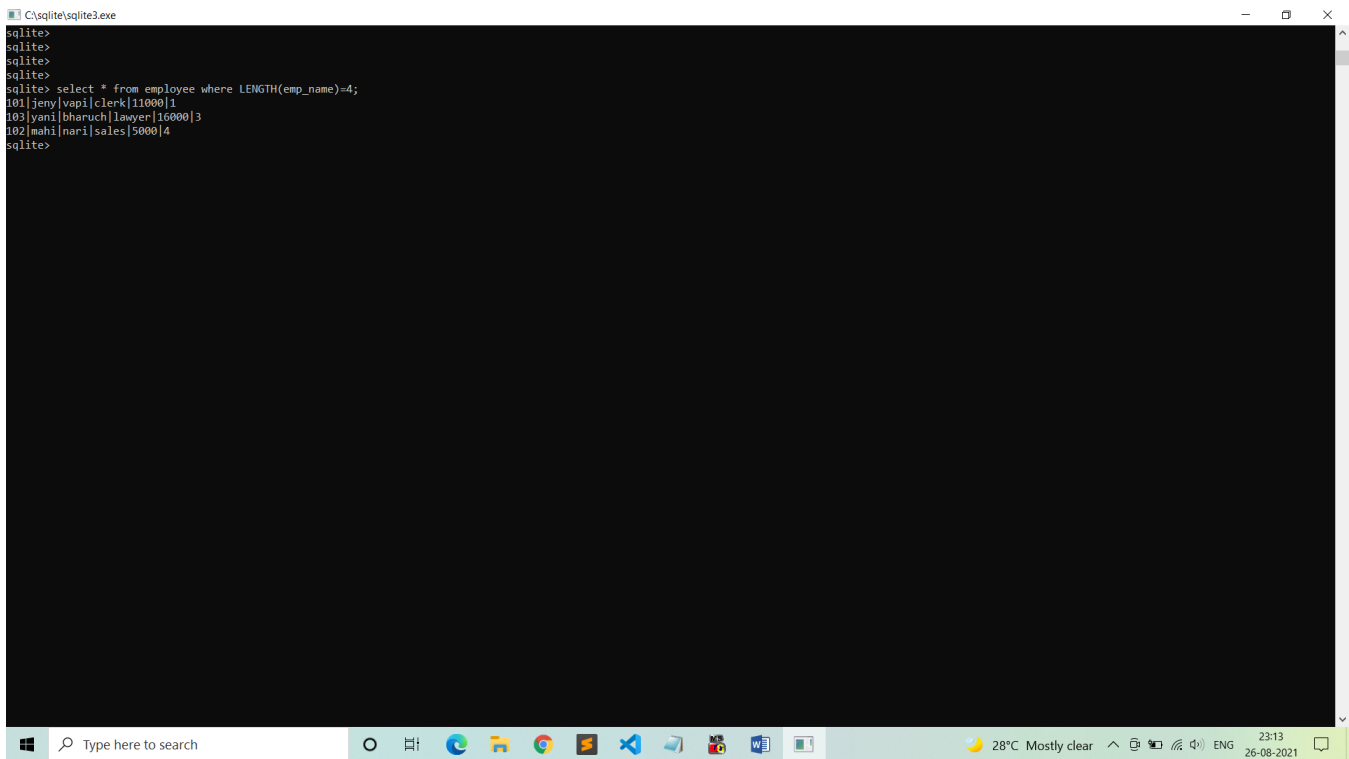


```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite> select * from employee where emp_name LIKE "m%";
102|mahek|surat|teacher|7000|2
102|mahi|nari|sales|5000|4
108|meera|vadodara|sales|11000|8
110|mr.sawant|surat|s.w|22000|10
sqlite>
```

The screenshot shows a Windows taskbar at the bottom with various application icons and a system tray displaying the date and time. The SQLite command prompt window is open, showing the execution of the query. The results are displayed as a table with columns separated by vertical bars.

10. DISPLAY EMPLOYEES WHOSE NAME CONTAIN FOUR CHARACTER

QUERY: select * from employee where LENGTH(emp_name)=4;

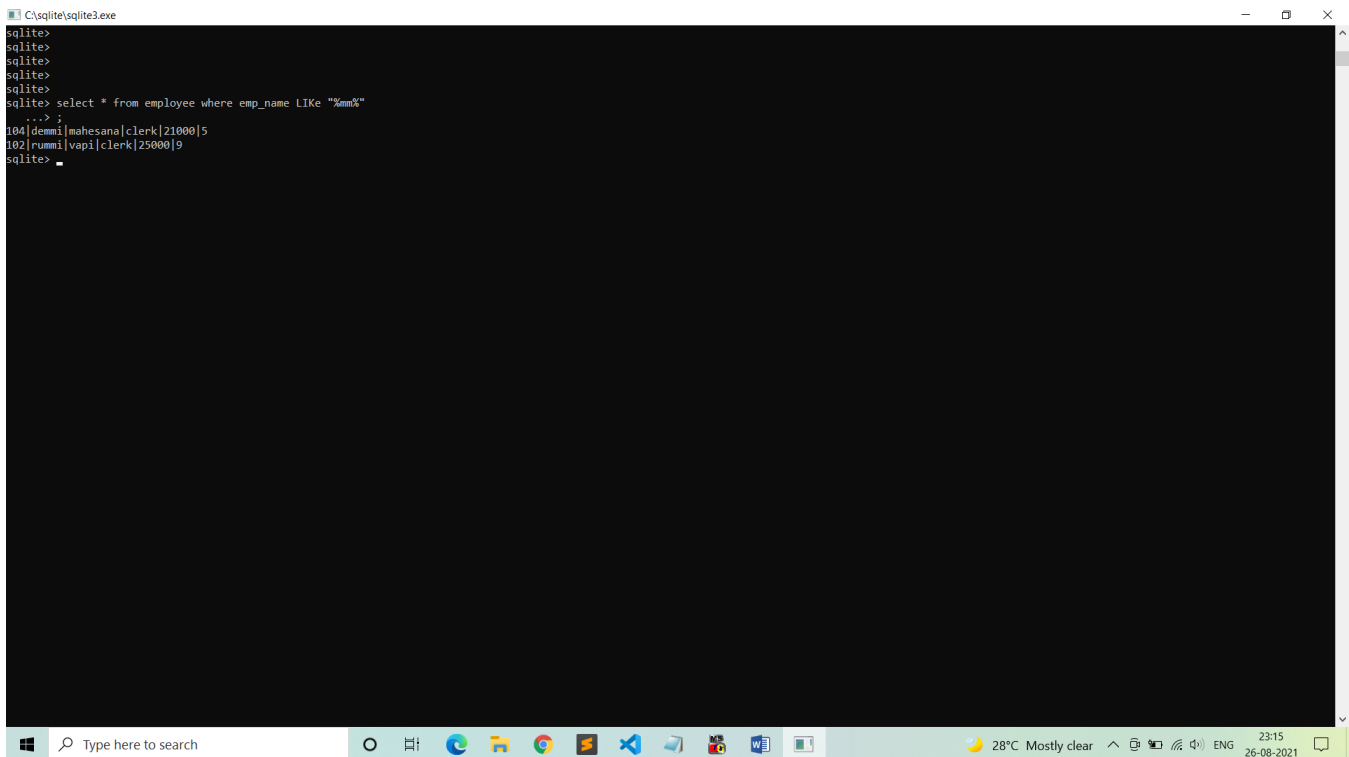


```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite> select * from employee where LENGTH(emp_name)=4;
101|jey|vapi|clerk|11000|1
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
sqlite>
```

The screenshot shows a Windows taskbar at the bottom with various application icons and a system tray displaying the date and time as 23:13 on 26-08-2021. The SQLite command prompt window is open, showing the execution of the query and the resulting output.

11. DISPLAY EMPLOYEES WHOSE NAME CONTAIN 'MM'

QUERY: select * from employee where emp_name LIKE "%mm%";



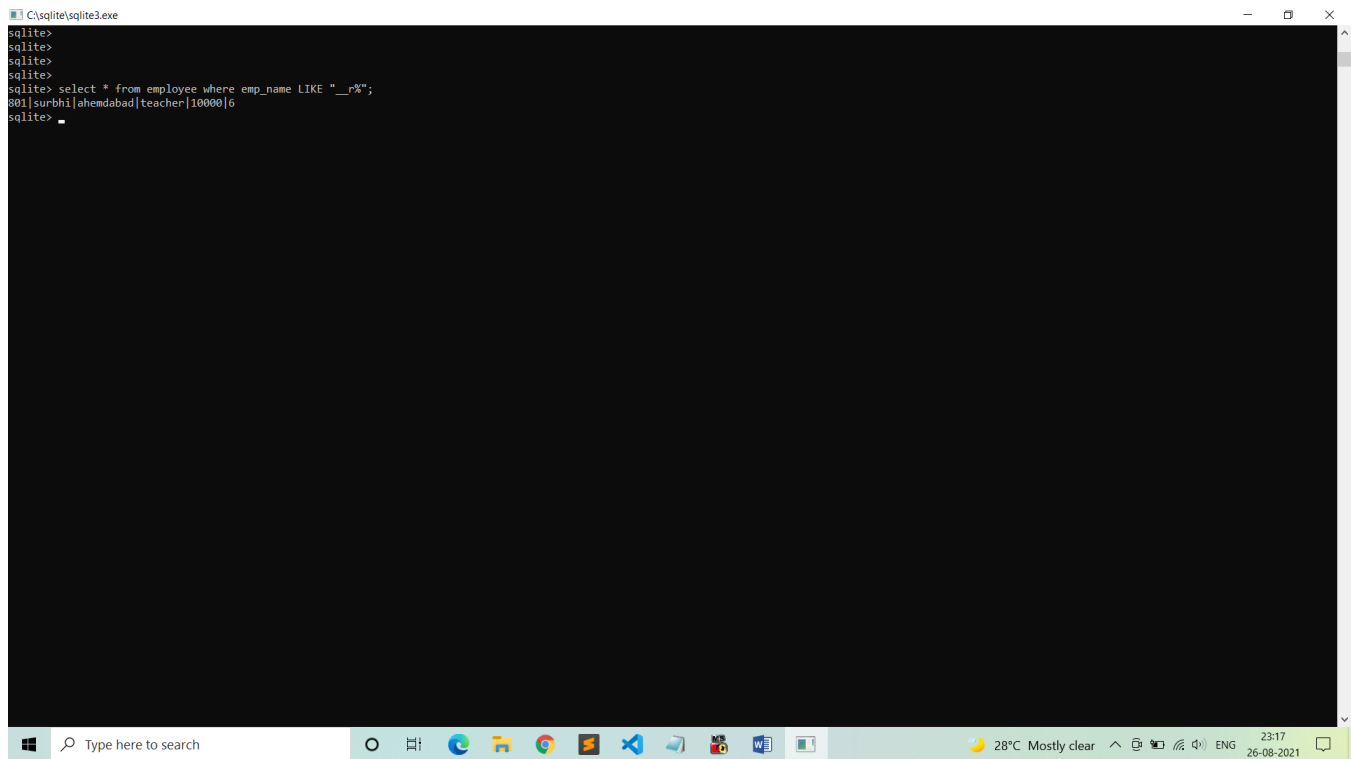
The screenshot shows a Windows command prompt window titled "C:\sqlite\sqlite3.exe". The prompt is "sqlite>". The user enters the query "select * from employee where emp_name LIKE \"%mm%\";". The output shows two rows of data:

emp_id	emp_name	emp_salary	emp_dept
104	demmi mahesana clerk 21000 5		
102	rummi vapi clerk 25000 9		

The taskbar at the bottom shows the Windows search bar, taskbar icons for various applications, and system tray information including temperature (28°C), weather (Mostly clear), and date/time (23:15, 26-08-2021).

12. DISPLAY EMPLOYEES WHOSE DEPARTMENT NAME 3RD CHARACTER IS 'R'

QUERY: select * from employee where emp_name LIKE "__r%";



```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite> select * from employee where emp_name LIKE "__r%";
801|surbhi|ahemdabad|teacher|10000|6
sqlite>
```

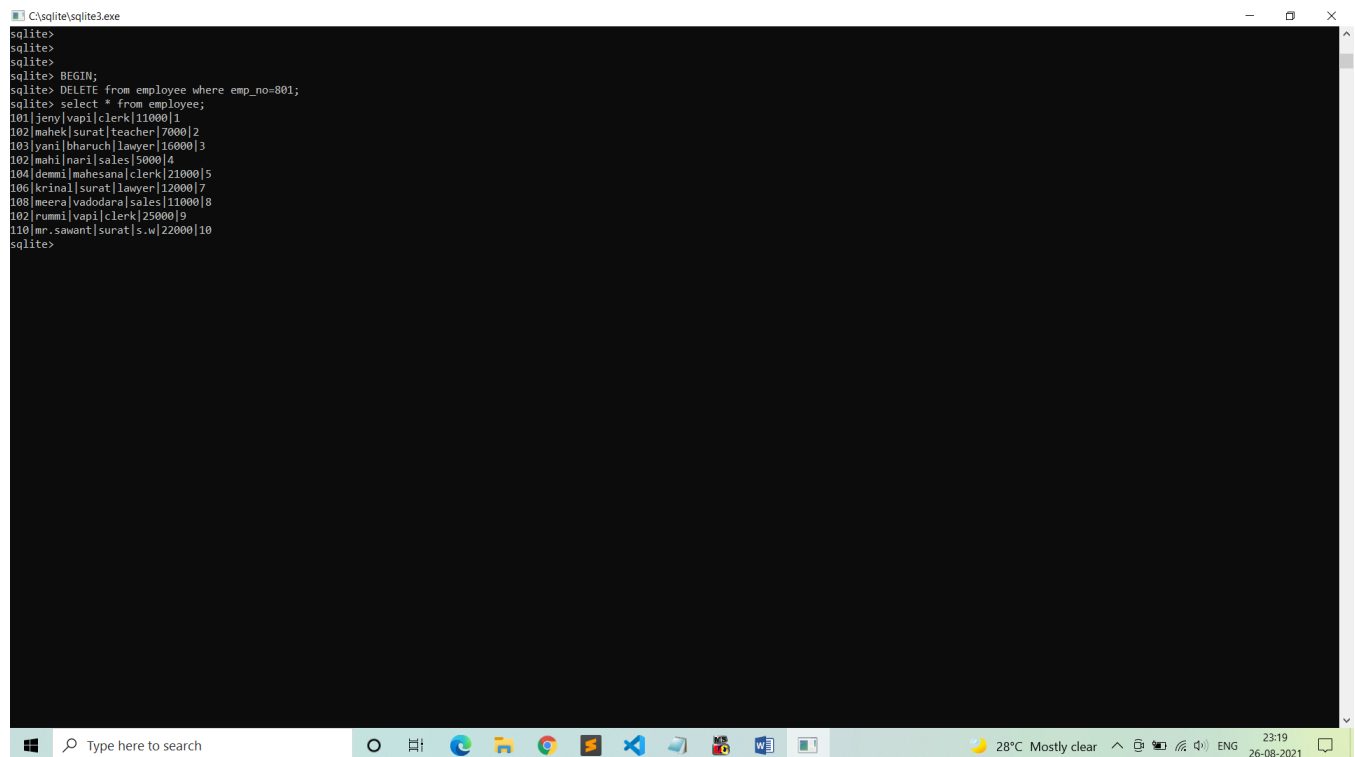
The screenshot shows a Windows taskbar at the bottom with various application icons and a system tray displaying the date and time. The main window is a black terminal with white text showing the SQLite command prompt. The query executed is 'select * from employee where emp_name LIKE "__r%";' and the result is a single row: '801|surbhi|ahemdabad|teacher|10000|6'.

13. DELETE EMPLOYEE WHOSE EMP_NO IS 801 WITH TRANSACTION

QUERY: BEGIN;

DELETE from employee where emp_no=801;

select * from employee;

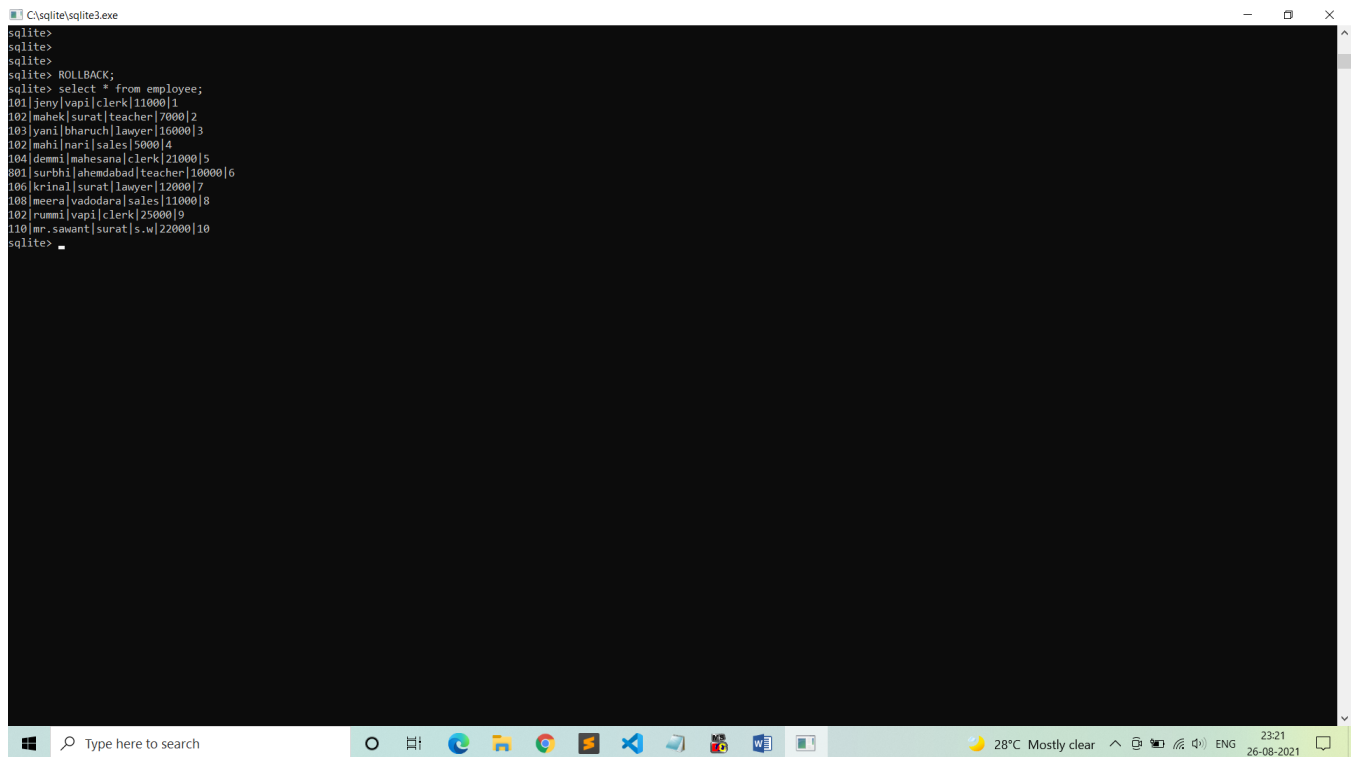


```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite> BEGIN;
sqlite> DELETE from employee where emp_no=801;
sqlite> select * from employee;
101|jenyl|vapi|clerk|11000|1
102|mahak|surat|teacher|7000|2
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
104|demmi|mahesana|clerk|21000|5
106|krinal|surat|lawyer|12000|7
108|meera|vadodara|sales|11000|8
102|rummi|vapi|clerk|25000|9
110|mr.sawant|surat|s.w|22000|10
sqlite>
```

14. ROLLBACK TRANSACTION

QUERY: ROLLBACK;

select * from employee;



The screenshot shows a Windows command prompt window titled "C:\sqlite\sqlite3.exe". The user has entered the following commands:

```
sqlite>
sqlite>
sqlite> ROLLBACK;
sqlite> select * from employee;
```

The output of the second query is a list of 10 employee records, each on a new line:

```
101|jeny|vapi|clerk|11000|1
102|mahak|surat|teacher|7000|2
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
104|demmi|mahesana|clerk|21000|5
801|surbhi|ahemdabad|teacher|10000|6
106|krinal|surat|lawyer|12000|7
108|meera|vadodara|sales|11000|8
102|rummi|vapi|clerk|25000|9
110|mr.sawant|surat|s.w|22000|10
```

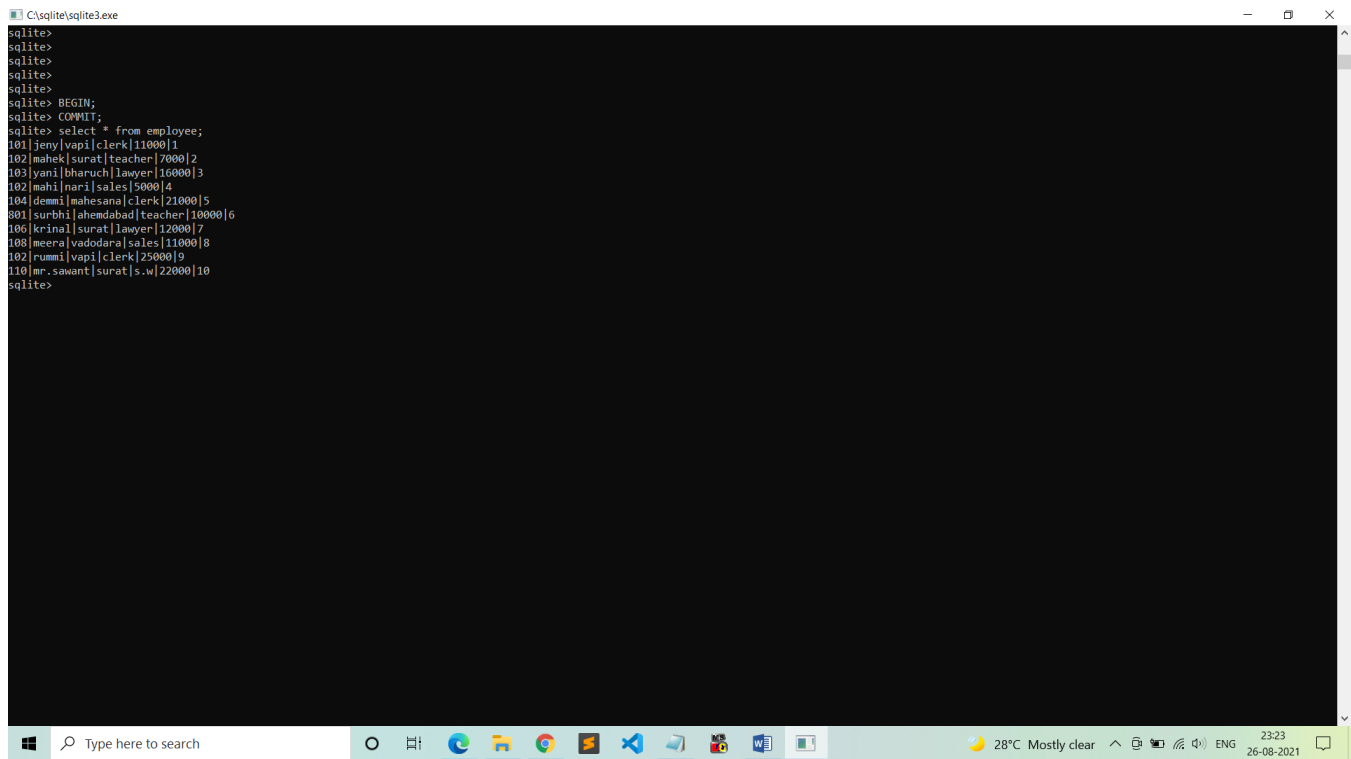
The window title bar shows standard Windows window controls (minimize, maximize, close). The taskbar at the bottom includes the search bar, task view button, and several application icons. The system tray on the right shows the date and time as 23:21 on 26-08-2021, along with weather information (28°C Mostly clear) and language settings (ENG).

15. COMMIT TRANSACTION

QUERY: BEGIN;

COMMIT;

select * from employee;



The screenshot shows a SQLite command prompt window with the following text:

```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite>
sqlite> BEGIN;
sqlite> COMMIT;
sqlite> select * from employee;
101|jeny|vapi|clerk|11000|1
102|mahek|surat|teacher|7000|2
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
104|demi|mahesana|clerk|21000|5
801|surbhi|ahemdabad|teacher|10000|6
106|krinal|surat|lawyer|12000|7
108|meera|vadodara|sales|11000|8
102|rummi|vapi|clerk|25000|9
110|mr.sawant|surat|s.w|22000|10
sqlite>
```

The window title is "C:\sqlite\sqlite3.exe". The Windows taskbar at the bottom shows the search bar, task view, and several application icons. The system tray on the right indicates a temperature of 28°C, mostly clear weather, and the date 26-08-2021.

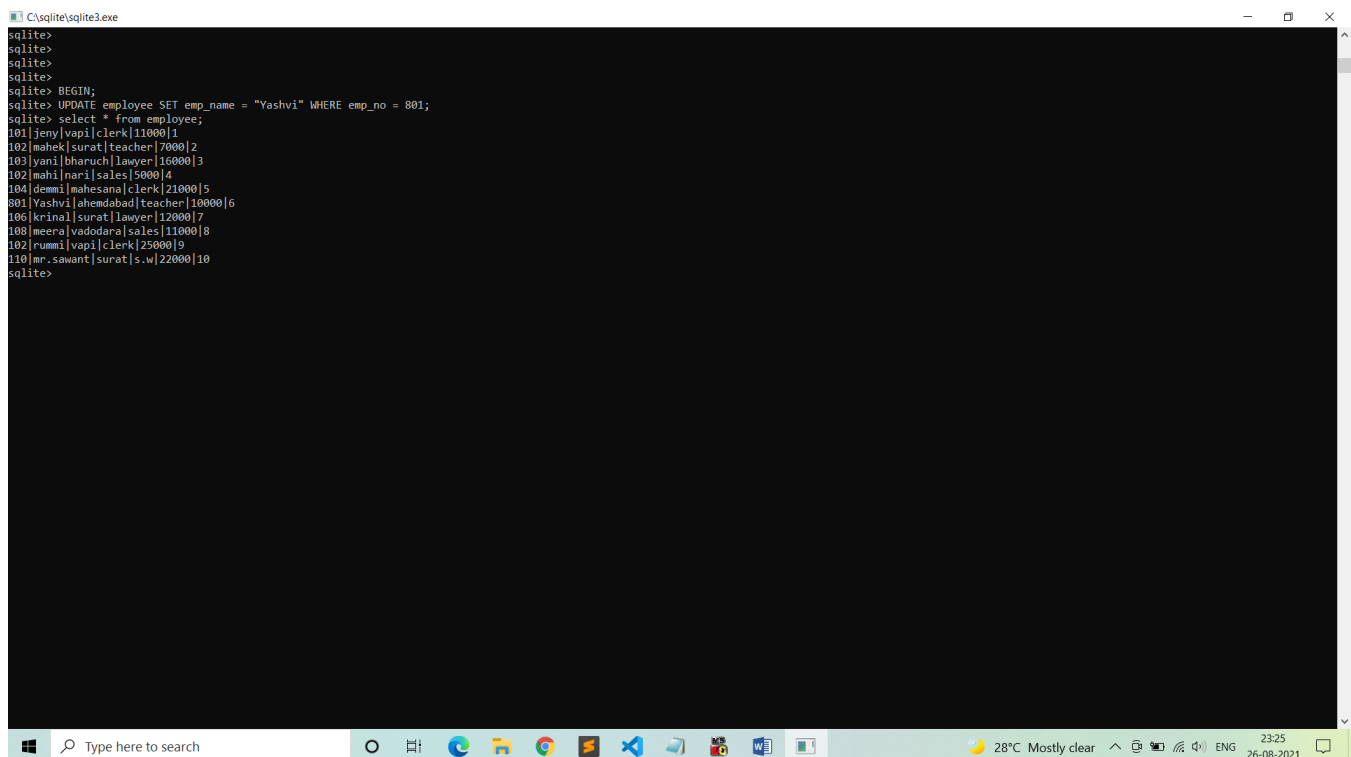
16. UPDATE EMPLOYEE NAME WHOSE EMP_NO IS 801 WITH TRANSACTION

QUERY: BEGIN;

UPDATE employee SET emp_name = "Yashvi"

WHERE emp_no = 801;

select * from employee;

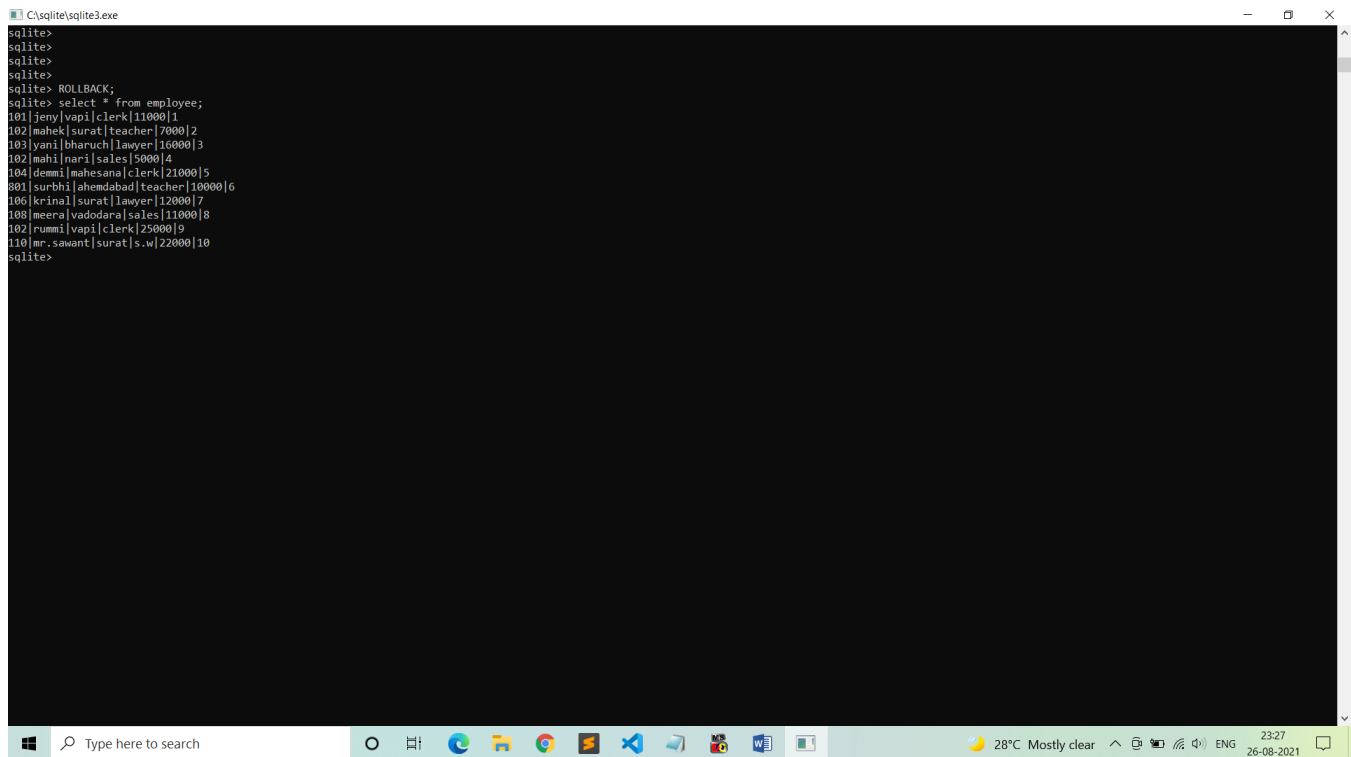


```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite>
sqlite> BEGIN;
sqlite> UPDATE employee SET emp_name = "Yashvi" WHERE emp_no = 801;
sqlite> select * from employee;
101|jeny|vapi|clerk|11000|1
102|mahek|surat|teacher|7000|2
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
104|demmi|mahesana|clerk|21000|5
801|Yashvi|ahemdabad|teacher|10000|6
106|krinal|surat|lawyer|12000|7
108|meera|vadodara|sales|11000|8
102|rummi|vapi|clerk|25000|9
110|mr.sawant|surat|s.w|22000|10
sqlite>
```

17. ROLLBACK TRANSACTION

QUERY: ROLLBACK;

select * from employee;



The screenshot shows a Windows command prompt window titled "C:\sqlite\sqlite3.exe". The user has entered several commands: "sqlite>", "sqlite>", "sqlite>", "sqlite>", "sqlite> ROLLBACK;", and "sqlite> select * from employee;". The output of the last command is a list of 10 employee records, each on a new line, showing employee ID, name, location, job title, and salary. The records are: 101|jeny|vapi|clerk|11000|1, 102|mahek|surat|teacher|7000|2, 103|yani|bharuch|lawyer|16000|3, 102|mahi|nari|sales|5000|4, 104|demmi|mahesana|clerk|21000|5, 801|surbhi|ahemdabad|teacher|10000|6, 106|krinal|surat|lawyer|12000|7, 108|meera|vadodara|sales|11000|8, 102|rumi|vapi|clerk|25000|9, and 110|mr.sawant|surat|s.w|22000|10. The window is set against a black background. The Windows taskbar at the bottom shows the search bar, task view button, and several application icons. The system tray on the right indicates a temperature of 28°C, mostly clear weather, and the date and time as 23:27 on 26-08-2021.

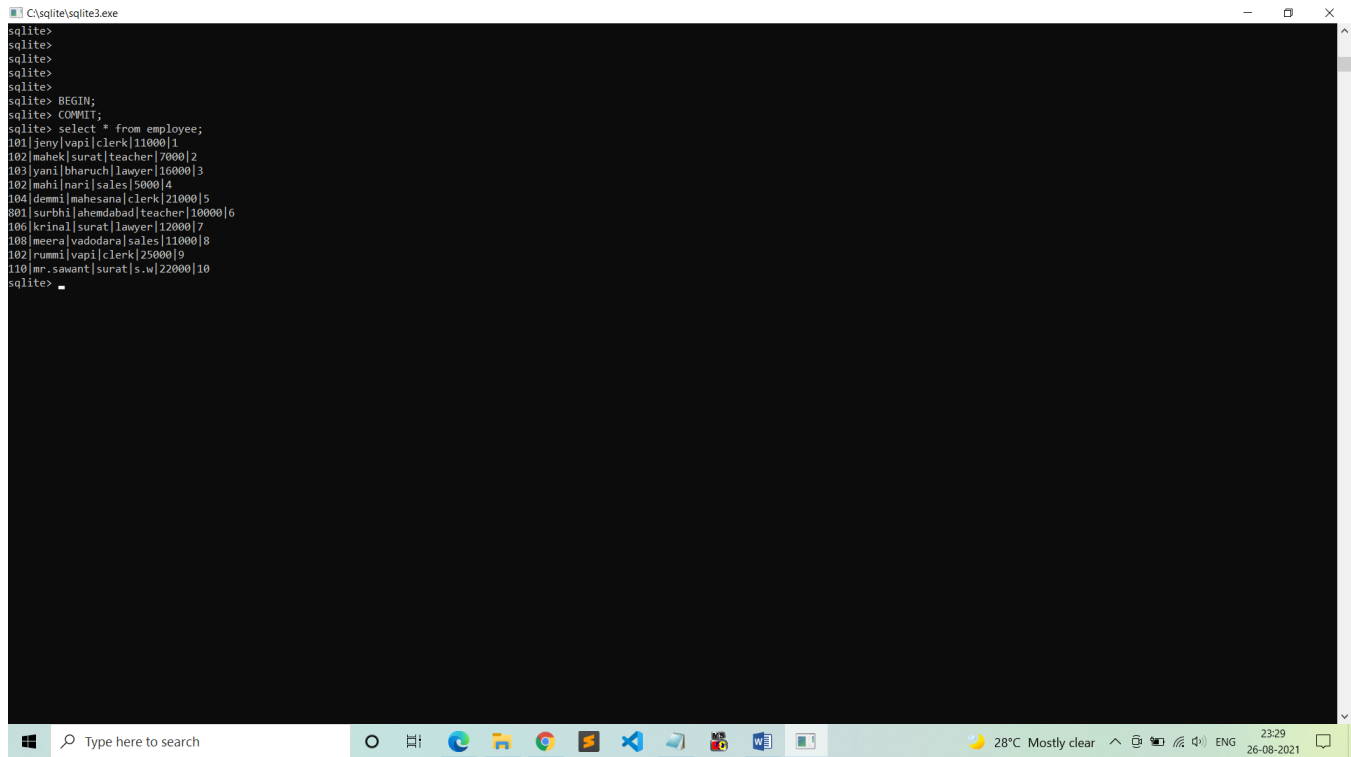
```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite>
sqlite> ROLLBACK;
sqlite> select * from employee;
101|jeny|vapi|clerk|11000|1
102|mahek|surat|teacher|7000|2
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
104|demmi|mahesana|clerk|21000|5
801|surbhi|ahemdabad|teacher|10000|6
106|krinal|surat|lawyer|12000|7
108|meera|vadodara|sales|11000|8
102|rumi|vapi|clerk|25000|9
110|mr.sawant|surat|s.w|22000|10
sqlite>
```

18. COMMIT TRANSACTION

QUERY: BEGIN;

COMMIT;

select * from employee;



```
C:\sqlite\sqlite3.exe
sqlite>
sqlite>
sqlite>
sqlite>
sqlite> BEGIN;
sqlite> COMMIT;
sqlite> select * from employee;
101|jeny|vapi|clerk|11000|1
102|mahek|surat|teacher|7000|2
103|yani|bharuch|lawyer|16000|3
102|mahi|nari|sales|5000|4
104|demi|mahesana|clerk|21000|5
801|surbhi|ahemdabad|teacher|10000|6
106|krinal|surat|lawyer|12000|7
108|meera|vadodara|sales|11000|8
102|rummi|vapi|clerk|25000|9
110|mr.sawant|surat|s.w|22000|10
sqlite>
```

The screenshot shows a Windows taskbar at the bottom with the search bar and several application icons. The system tray on the right indicates a temperature of 28°C, mostly clear weather, and the date 26-08-2021 at 23:29. The SQLite3 command prompt window is open, displaying the execution of a BEGIN transaction, followed by a COMMIT, and then a SELECT query that returns 10 rows of employee data.

**THANK FOR WATHCHING
MY SQL PROGRAM**

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