SQL Data Analyst Projects

By SANDIP SHRESTHA

1. Find all doctors who have treated a patient for “Diabetes.”

```
SELECT
    d.Doctor_ID, fname, lname,Illness
FROM
    doctor AS d
        INNER JOIN
    worker AS w ON d.D_Worker_ID = w.Worker_ID
        INNER JOIN
    diagnosis AS di ON d.Doctor_ID = di.Doctor_ID
WHERE
    Illness = 'Diabetes';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Doctor_ID	fname	lname	Illness
51235	Tilda	White	Diabetes

2.List the details of all patients who have been prescribed “B205.”

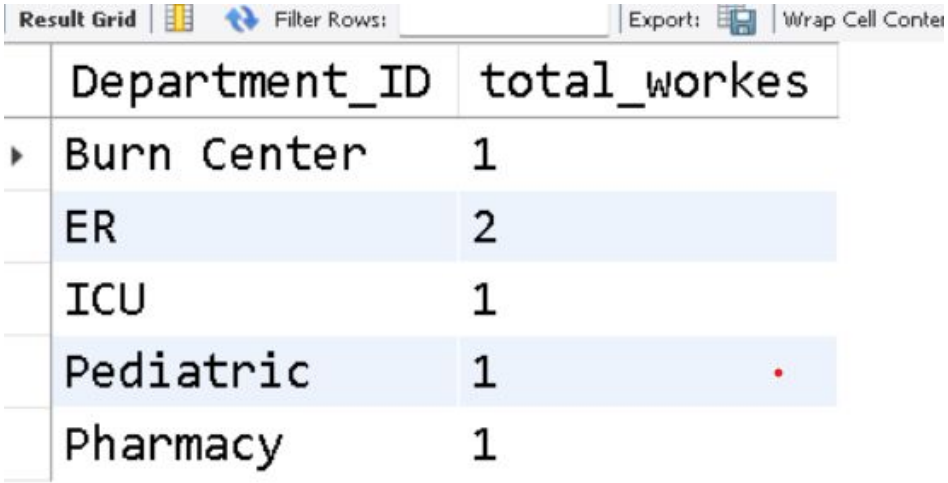
```
SELECT
p.Patient_ID,p.fname,p.lname,p.Gender,m.Medicatio
n_ID

    FROM

    patient AS p

        JOIN

    medication_prescribed AS m ON p.Patient_ID =
m.Patient_ID

        JOIN

    medication AS me ON me.Medication_ID =
m.Medication_ID

WHERE

    m.Medication_ID = 'B205';
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Patient_ID	fname	lname	Gender	Medication_ID
975913	Harry	Sax	M	B205

3. Find the total number of workers in each department

```
SELECT
    de.Department_ID, COUNT(*) AS total_workes
FROM
    worker AS w
        JOIN
    doctor AS d ON w.Worker_ID = d.D_Worker_ID
        JOIN
    department de ON d.Department_ID =
de.Department_ID
GROUP BY de.Department_ID;
```



Department_ID	total_workes
Burn Center	1
ER	2
ICU	1
Pediatric	1
Pharmacy	1

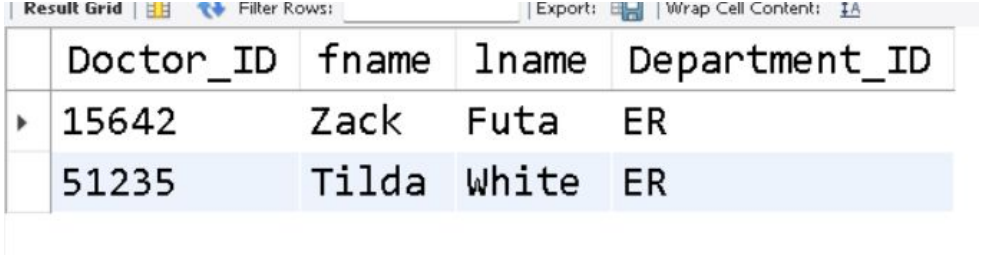
4. Retrieve the names and phone numbers of all patients who have been diagnosed with “Diabetes.”

```
SELECT
    p.fname,p.lname,p.telephone,d.Illness
FROM
    patient AS p
        JOIN
    diagnosis AS d ON p.Patient_ID = d.Patient_ID
WHERE
    d.Illness = 'Diabetes';
```

fname	lname	telephone	Illness
Jenny	Tayla	(642)176-7421	Diabetes

5. Get the names and IDs of all doctors who work in the “ER” department.

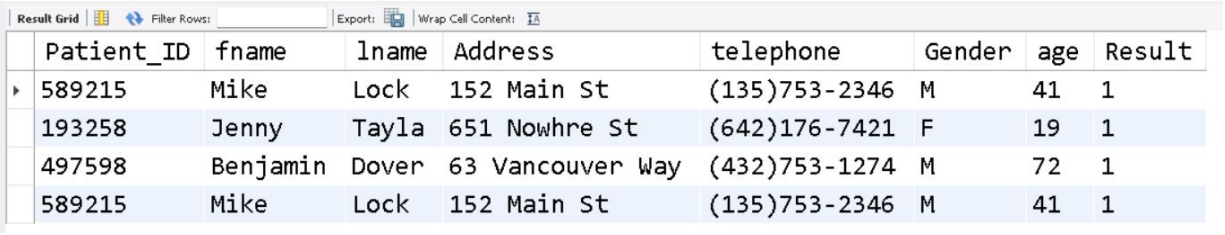
```
SELECT
    d.Doctor_ID, w.fname, w.lname, d.Department_ID
FROM
    doctor AS d
        JOIN
    worker AS w ON d.D_Worker_ID = w.Worker_ID
WHERE
    d.Department_ID = 'ER';
```



Doctor_ID	fname	lname	Department_ID
15642	Zack	Futa	ER
51235	Tilda	White	ER

6 .List all patients who had a test conducted with a positive result (Result = 1).

```
SELECT
    p.Patient_ID,
    p.fname,
    p.lname,
    p.Address,
    p.telephone,
    p.Gender,
    p.age,
    t.Result
FROM
    patient AS p
        JOIN
    tests AS t ON p.Patient_ID = t.Patient_ID
WHERE    t.Result = 1;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Patient_ID	fname	lname	Address	telephone	Gender	age	Result
589215	Mike	Lock	152 Main St	(135)753-2346	M	41	1
193258	Jenny	Tayla	651 Nowhre St	(642)176-7421	F	19	1
497598	Benjamin	Dover	63 Vancouver Way	(432)753-1274	M	72	1
589215	Mike	Lock	152 Main St	(135)753-2346	M	41	1

7. Find the total salary expenditure for all workers.

```
SELECT
    SUM(salary) AS total_salary
FROM worker;
```

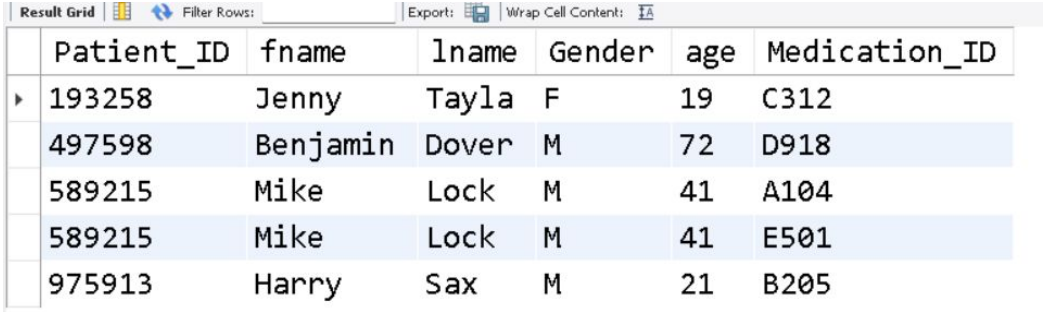
8. List all cafeteria staff along with their job position and the food type served in their assigned cafeteria.

```
SELECT
    cs.Staff_ID, cs.Position, c.Food_Type,
s.Job_Title
FROM
    cafeteria_staff AS cs
        JOIN
    cafeteria AS c ON cs.Cafeteria_ID =
c.Cafeteria_ID
        JOIN
    staff AS s ON cs.Staff_ID = s.Staff_ID;
```

Staff_ID	Position	Food_Type	Job_Title
12	Cook	Lunchables	Cafeteria Staff
1834	Server	Mash Potatoes	Cafeteria Staff

9. Show details of patients along with the medication they are prescribed, even if no medication has been prescribed.

```
SELECT
  p.Patient_ID,
  p.fname,
  p.lname,
  p.Gender,
  p.age,
  med.Medication_ID
FROM
  patient AS p
    left  JOIN
  medication_prescribed AS med ON p.Patient_ID = med.Patient_ID
    left JOIN
  medication AS m ON med.Medication_ID = m.Medication_ID;
```



Result Grid | Filter Rows: | Export: | Wrap Cell Content:

Patient_ID	fname	lname	Gender	age	Medication_ID
193258	Jenny	Tayla	F	19	C312
497598	Benjamin	Dover	M	72	D918
589215	Mike	Lock	M	41	A104
589215	Mike	Lock	M	41	E501
975913	Harry	Sax	M	21	B205

10. Find the average age of patients diagnosed with “Flu.”

```
SELECT d.Illness
    ,round(AVG(age) ,2)AS avg_patients
FROM
    patient AS p
        JOIN
    diagnosis AS d ON p.Patient_ID = d.Patient_ID
WHERE
    d.Illness = 'FLU'
    group by d.Illness;
```