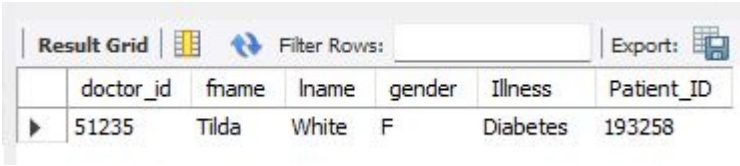
SQL DATA ANALYSIS PROJECT

BY PRATHAMESH DHAWADE

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

```
SELECT
d.doctor_id,fname,lname,gender,Illness,Patient_I
D FROM doctor d

JOIN worker w ON d.D_Worker_ID = w.Worker_ID

JOIN diagnosis de ON de.doctor_id = d.doctor_id

where illness = 'Diabetes'
```



doctor_id	fname	lname	gender	Illness	Patient_ID
51235	Tilda	White	F	Diabetes	193258

#2. List the details of all patients who have been prescribed "B205."

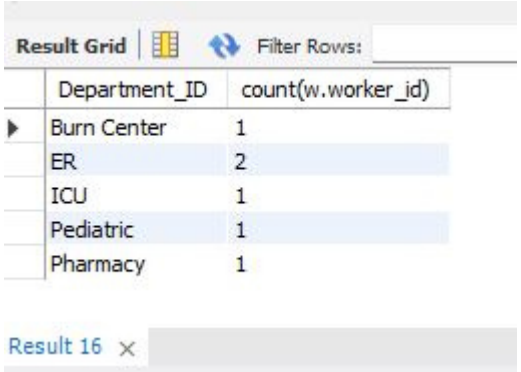
```
SELECT * FROM patient p

JOIN medication_prescribed mp ON p.patient_id
= mp.patient_id
JOIN medication m on mp.Medication_ID =
m.Medication_ID
where m.Medication_ID = 'B205'
```

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

Patient_ID	fname	lname	Address	telephone	Gender	Age	Blood_Type	Cafeteria_ID	Bill_ID	Prescription_ID	Medication_ID	Patient_ID	Medication_ID	Doses	Expiration_Date
975913	Harry	Sax	53 Chendogg Ave	(643)764-1256	M	21	O-	Campbell	1632	102	B205	975913	B205	5	2026-09-20

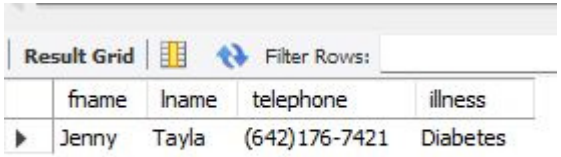
#3. Find the total number of workers in each department.

```
SELECT d.Department_ID,count(w.worker_id)
FROM department d
JOIN doctor doc on d.Department_ID =
doc.Depar tment_ID
JOIN worker w on doc.D_worker_id =
w.Worker_ID
GROUP by d.Department_ID
```



#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 p

JOIN diagnosis d on p.patient_id = d.patient_id

WHERE d.illness = 'Diabetes'
```



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

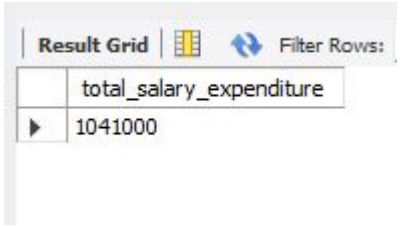
#5. Get the names and IDs of all doctors who work in the "ER" department.

```
SELECT d.doctor_id,w.fname as
Doctor_firstName, w.lname as doctor_lastName
FROM doctor d

JOIN worker w on w.Worker_ID = d.D_Worker_ID

WHERE d.department_id = 'ER'
```

doctor_id	Doctor_firstName	doctor_lastName
15642	Zack	Futa
51235	Tilda	White

7. Find the total salary expenditure for all workers.

```
SELECT sum(salary) as total_salary_expenditure
FROM worker;
```



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

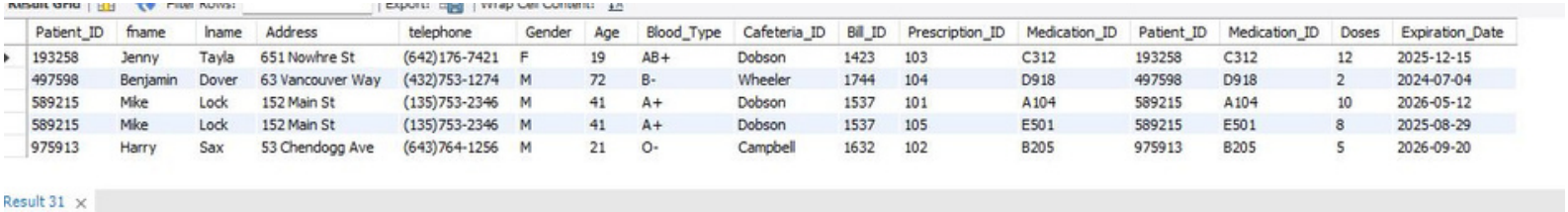
```
SELECT
cs.Staff_ID,s.Job_Title,cs.Position,c.Food_Type
FROM cafeteria_staff cs
JOIN staff s on s.Staff_ID = cs.Staff_ID
JOIN cafeteria c on cs.Cafeteria_ID =
c.Cafeteria_ID;
```


Result Grid | Filter Rows: | Export:

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

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

```
SELECT * FROM patient p

LEFT join medication_prescribed mp ON
p.patient_id = mp.Patient_ID
LEFT join medication m on mp.Medication_ID =
m.Medication_ID
```

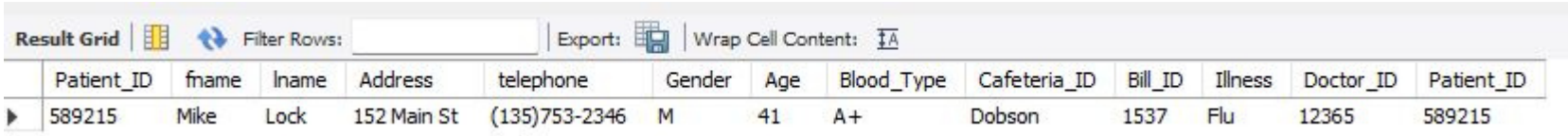


Patient_ID	fname	lname	Address	telephone	Gender	Age	Blood_Type	Cafeteria_ID	Bill_ID	Prescription_ID	Medication_ID	Patient_ID	Medication_ID	Doses	Expiration_Date
193258	Jenny	Tayla	651 Nowhre St	(642)176-7421	F	19	AB+	Dobson	1423	103	C312	193258	C312	12	2025-12-15
497598	Benjamin	Dover	63 Vancouver Way	(432)753-1274	M	72	B-	Wheeler	1744	104	D918	497598	D918	2	2024-07-04
589215	Mike	Lock	152 Main St	(135)753-2346	M	41	A+	Dobson	1537	101	A104	589215	A104	10	2026-05-12
589215	Mike	Lock	152 Main St	(135)753-2346	M	41	A+	Dobson	1537	105	E501	589215	E501	8	2025-08-29
975913	Harry	Sax	53 Chendogg Ave	(643)764-1256	M	21	O-	Campbell	1632	102	B205	975913	B205	5	2026-09-20

Result 31

#10.Find the average age of patients diagnosed with "Flu."

```
SELECT * FROM patient p

JOIN diagnosis d on p.Patient_ID = d.Patient_ID

where d.Illness = 'Flu'
```



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

Patient_ID	fname	lname	Address	telephone	Gender	Age	Blood_Type	Cafeteria_ID	Bill_ID	Illness	Doctor_ID	Patient_ID
589215	Mike	Lock	152 Main St	(135)753-2346	M	41	A+	Dobson	1537	Flu	12365	589215