

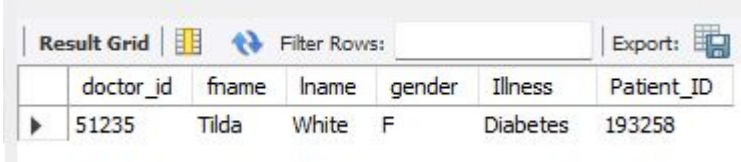


# SQL DATA ANALYSIS PROJECT

**BY PRATHAMESH DHAWADE**

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

```
SELECT  
d.doctor_id,fname,lname,gender,illness,patient_id  
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'
```



The screenshot shows a database query result grid. The grid has a header row with columns: doctor\_id, fname, lname, gender, illness, and Patient\_ID. The first row of data contains the values: 51235, Tilda, White, F, Diabetes, and 193258. The grid is titled 'Result Grid' and includes a 'Filter Rows' section and an 'Export' button.

	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
```

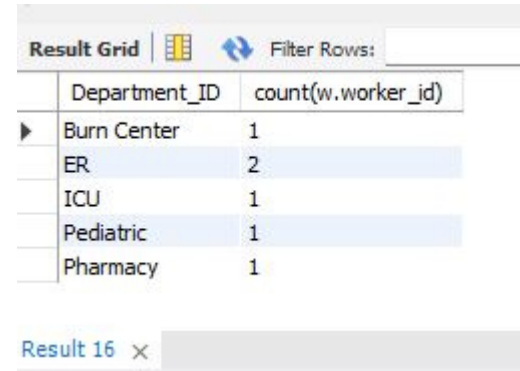
```
JOIN medication m on mp.Medication_ID =  
m.Medication_ID
```

```
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.Department_ID
JOIN worker w on doc.D_worker_id =
w.Worker_ID
GROUP by d.Department_ID
```

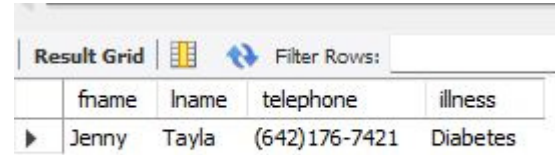


The screenshot shows a database interface with a 'Result Grid' tab. The grid displays the results of a query, showing the count of workers for each department. The columns are 'Department\_ID' and 'count(w.worker\_id)'. The rows are: Burn Center (1), ER (2), ICU (1), Pediatric (1), and Pharmacy (1). The 'ER' row is highlighted. Below the grid, there is a tab labeled 'Result 16' with a close button (X).

Department_ID	count(w.worker_id)
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 p  
JOIN diagnosis d on p.patient_id = d.patient_id  
WHERE d.illness = 'Diabetes'
```



The screenshot shows a database interface with a 'Result Grid' tab. It includes a 'Filter Rows' button and a table with four columns: 'fname', 'lname', 'telephone', and 'illness'. A single row of data is displayed, showing 'Jenny' as the first name, 'Tayla' as the last name, '(642) 176-7421' as the telephone number, and 'Diabetes' as the illness.

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

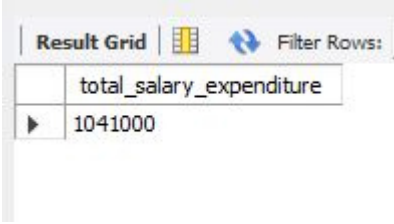
#5. Get the names and IDs of all doctors who work in the "ER" department.

```
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;
```



The screenshot shows a database interface with a 'Result Grid' tab. It contains a single row of data with the column name 'total\_salary\_expenditure' and the value '1041000'. There are also icons for a grid, a refresh button, and a 'Filter Rows:' label.

Result Grid		Filter Rows:
	total_salary_expenditure	
▶	1041000	

#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: <input type="text"/>			
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 x

## #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: <input type="text"/>   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