

Hospital Data Analysis:



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

```
SELECT d.Doctor_ID, Illness, Patient_ID  
FROM DOCTOR d  
JOIN DIAGNOSIS diag  
ON d.Doctor_ID = diag.Doctor_ID  
WHERE diag.Illness = 'Diabetes';
```



The screenshot shows a database query results grid. At the top, there are buttons for "Result Grid" (highlighted in blue), "Filter Rows" (with a magnifying glass icon), and a refresh icon. The result grid has three columns: "Doctor_ID", "Illness", and "Patient_ID". A single row of data is displayed: Doctor_ID 51235, Illness Diabetes, and Patient_ID 193258.

	Doctor_ID	Illness	Patient_ID
▶	51235	Diabetes	193258

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

```
SELECT *FROM patient AS p  
JOIN medication_prescribed AS m  
ON p.Patient_ID = m.Patient_ID  
WHERE Medication_ID = 'B205';
```



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

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

```
SELECT d.Department_ID, COUNT(w.Worker_ID) AS Total_Workers  
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;
```

Result Grid | Filter Rows:

	Department_ID	Total_Workers
▶	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.”



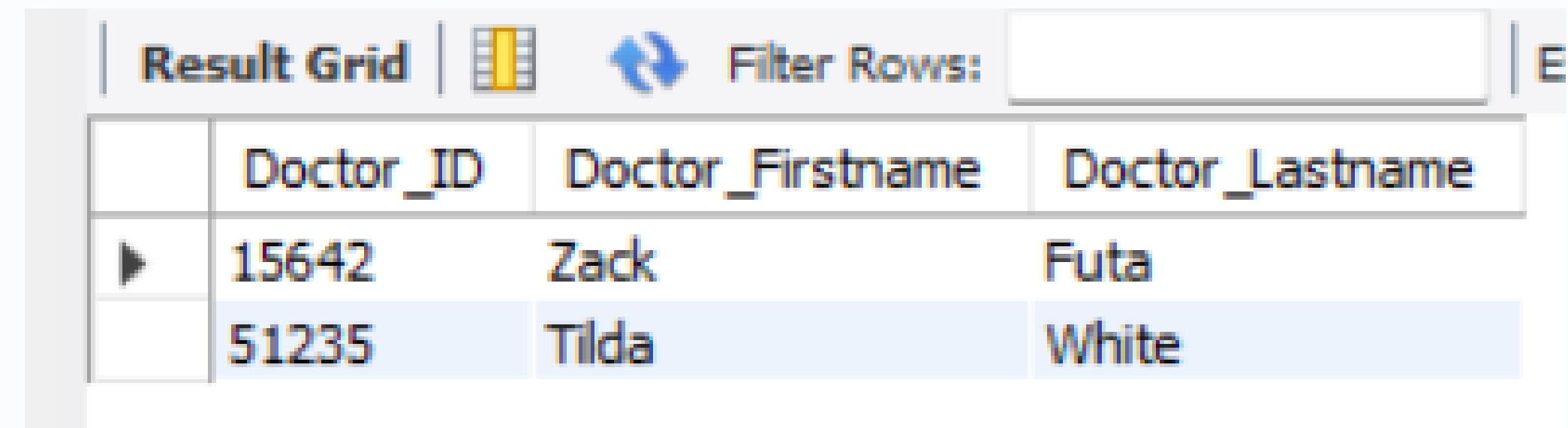
```
SELECT p.fname, p.lname, telephone, Illness  
FROM patient AS p  
JOIN diagnosis AS d  
ON p.Patient_ID = d.Patient_ID  
WHERE Illness = 'Diabetes';
```

Result Grid | Filter Rows:

	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 AS d  
JOIN worker AS w  
ON d.D_Worker_ID = w.Worker_ID  
WHERE Department_ID = 'ER';
```



The screenshot shows a database query results grid with the following data:

	Doctor_ID	Doctor_Firstname	Doctor_Lastname
▶	15642	Zack	Futa
	51235	Tilda	White

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

```
SELECT p.Patient_ID, p.fname, p.lname, t.Test_ID, t.Illness  
FROM PATIENT p  
JOIN TESTS t ON p.Patient_ID = t.Patient_ID  
WHERE t.Result = 1;
```

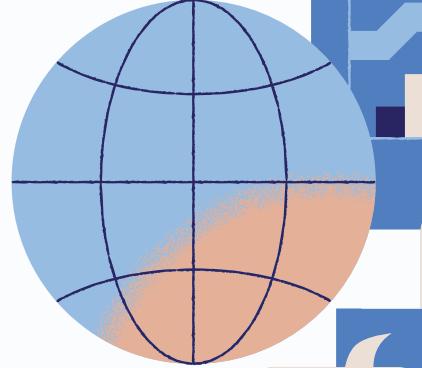
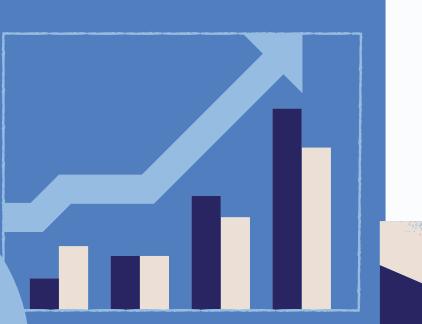
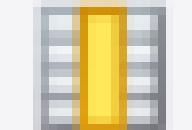


A decorative illustration on the left side of the slide features a blue globe on the left, a bar chart with an upward arrow in the center, and two stylized figures (a man and a woman) sitting at a desk on the right, appearing to work on a computer.

	Patient_ID	fname	lname	Test_ID	Illness
▶	589215	Mike	Lock	135	Flu
	193258	Jenny	Tayla	357	Diabetes
	497598	Benjamin	Dover	468	Pneumonia
	589215	Mike	Lock	579	Hypertension

7.Find the total salary expenditure for all workers.

```
SELECT SUM(Salary) AS Total_Salary_Expenditure  
FROM WORKER;
```



	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 cs.Staff_ID = s.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 p.Patient_ID, p.fname, p.lname, p.Age, m.Medication_ID  
FROM PATIENT as p  
LEFT JOIN MEDICATION_PRESCRIBED as mp ON p.Patient_ID = mp.Patient_ID  
LEFT JOIN MEDICATION as m ON mp.Medication_ID = m.Medication_ID;
```

Result Grid | Filter Rows: Export:

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

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

```
SELECT *, AVG(p.Age) AS Average_Age  
FROM PATIENT p  
JOIN DIAGNOSIS diag ON p.Patient_ID = diag.Patient_ID  
WHERE diag.Illness = 'Flu';
```



	Patient_ID	fname	lname	Address	telephone	Gender	Age	Blood_Type	Cafeteria_ID	Bill_ID	Illness	Doctor_ID	Patient_ID	Average_Age
▶	589215	Mike	Lock	152 Main St	(135)753-2346	M	41	A+	Dobson	1537	Flu	12365	589215	41.0000