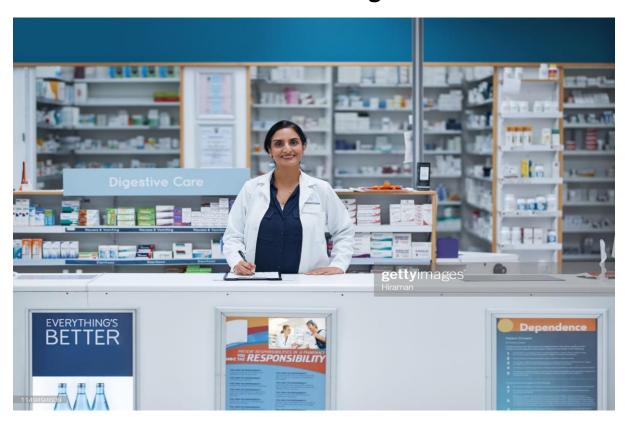
SQL PROJECT

Dhanvantari Medicals

Medical Store Management



Abstract:

The Medical Store Management System is a comprehensive database project designed to streamline and enhance the operations of a Medical store. This project aims to create an efficient and organized platform for managing customer information, medication, Patient & doctor records, and Bill transactions. By implementing this system, the medical store can improve customer service, optimize inventory control, and maintain accurate records of its activities.

Aim:

The aim of this project is to develop a robust SQL-based medical Store Management System that addresses the specific needs and challenges of a medical store. This system will serve as a central repository for storing, managing, and retrieving critical data related to customers, medications, prescriptions, Doctors Employees and Bill etc. The primary goal is to improve the overall efficiency, accuracy, and customer satisfaction of the Medical store.

Objectives:

<u>Patient Management</u>: Develop a feature for adding, updating, and deleting customer information, including personal details and information.

<u>Medicines</u>: Create a module to manage medication inventory, including details such as name, description, Vendors, unit price, and Expire and Manufacturing Date.

<u>Doctors Records</u>: Implement a system for recording and managing prescription details for customers, including prescription dates, doctor names, and prescribed medications.

<u>Bill Generation</u>: Generate invoices or receipts for customers after completing a sale transaction, providing a clear breakdown of the purchased items and their costs.

<u>Pharmacist Management</u>: If employees are part of the system, monitor their information and assess their sales performance.

Vendors: vendors also main part of medicals full fill the medical requirement as per order.

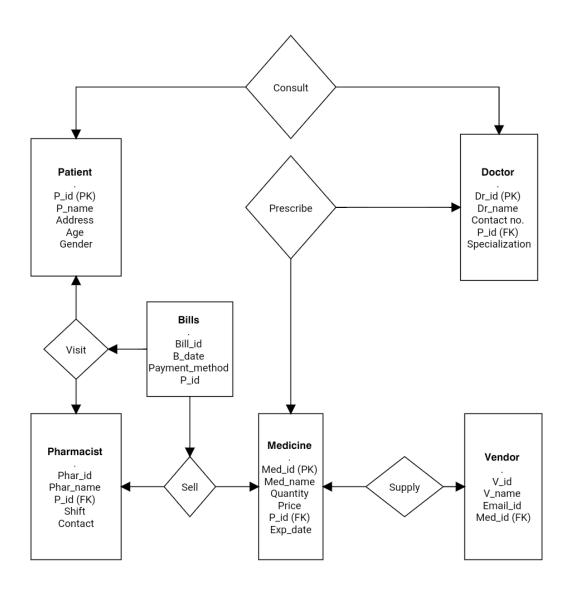
Introduction:

The modern medical store faces the challenge of efficiently managing its operations while providing quality service to customers. To address these challenges, we present the medical Store Management System, a database project designed to streamline the store's daily activities. This system aims to create an organized and efficient environment for managing customer information, medication inventory, prescription records, and sales transactions. By centralizing data and automating key processes, the pharmacy store can enhance customer service, optimize inventory control, and maintain accurate records of its business activities.

In this project, we will detail the design and implementation of the database schema, the SQL queries and statements used for various functions, and the user interface that allows store employees to interact with the system. The project's objectives include improving customer management, medicine ,consulting doctors , sales processing, vendors and reporting. Additionally, we provide an optional feature for employee management to enhance the store's operational transparency.

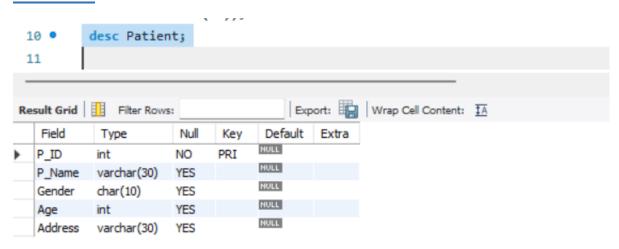
The medical Store Management System is a crucial tool for modernizing and optimizing the operations of a medical store, ultimately leading to improved customer satisfaction and business efficiency.

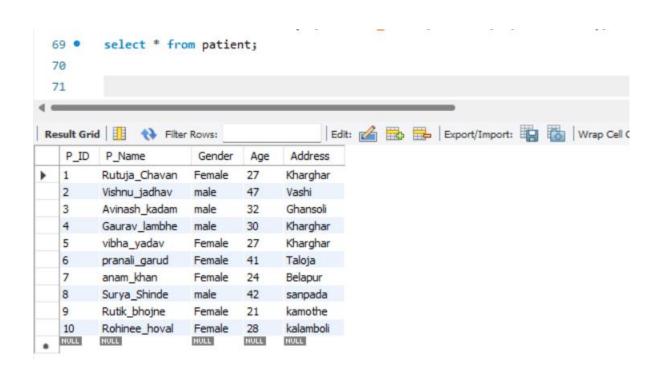
ER Diagram:



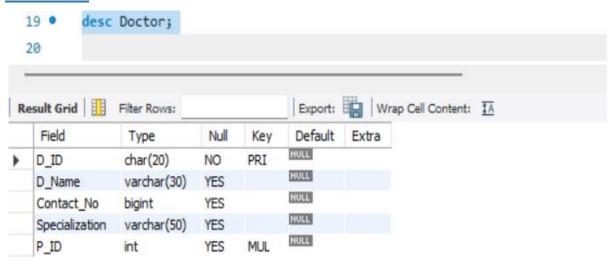
Structure & Contents Of Tables:

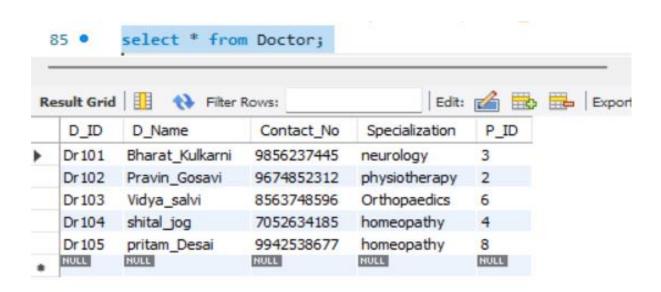
Patient -



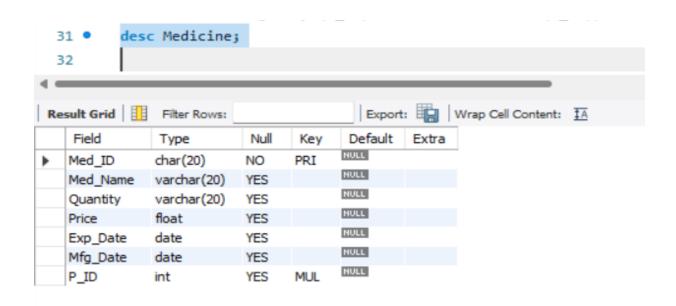


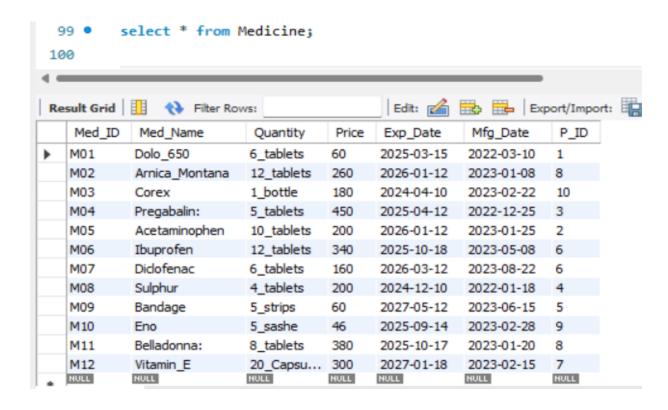
Doctor -



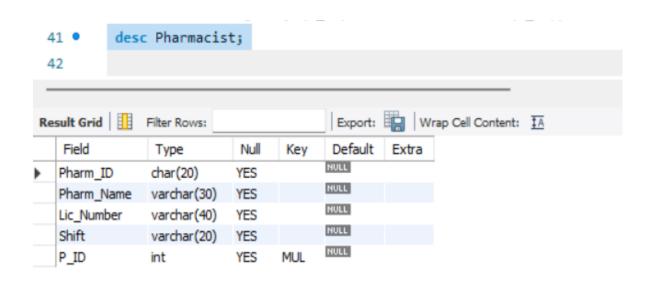


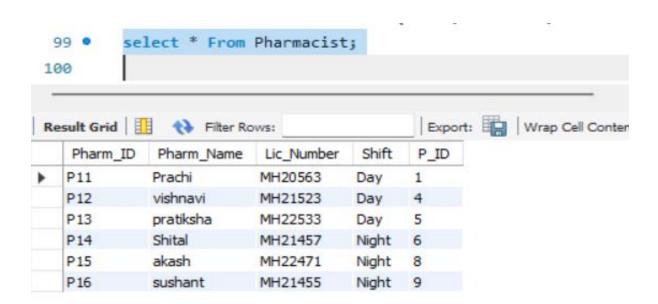
Medicine -



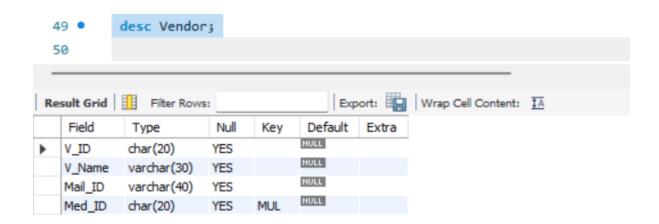


Pharmacist -



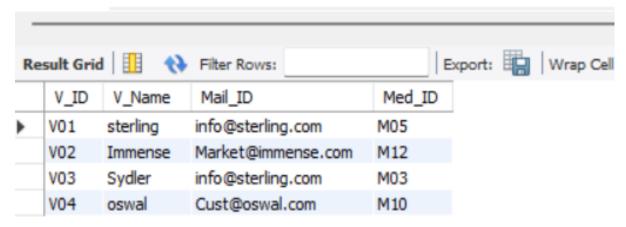


Vendor -

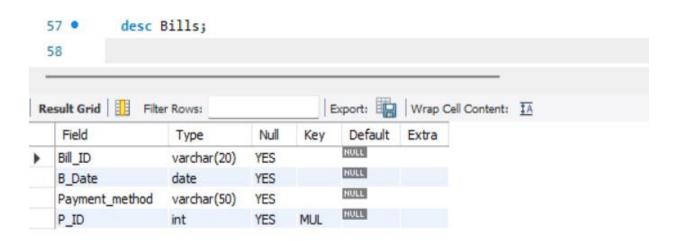


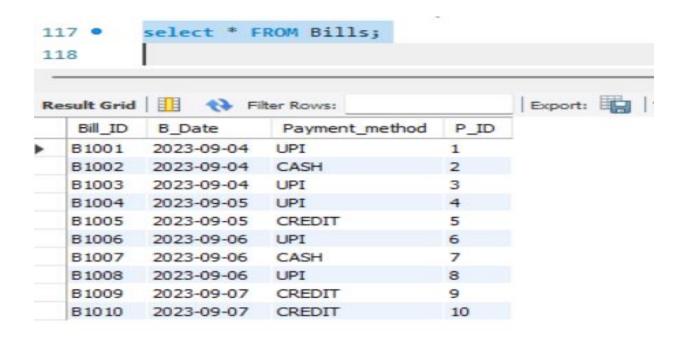
115 • select * from Vendor;

116



Bills-



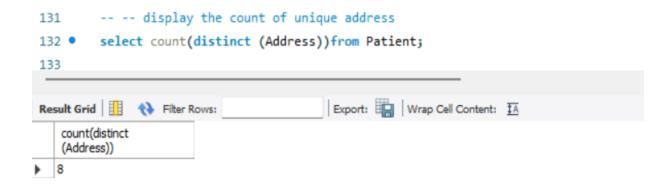


Que1. display the count of unique address

Query:

select count(distinct (Address))from Patient;

- DISTINCT to eliminate duplicate values from a column and useful for filtering out duplicate values



Que.2. display the medicine name whose medicine price between 300 to 500

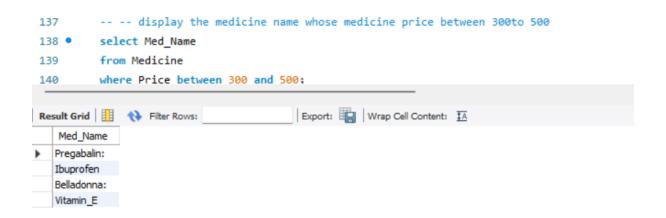
Query:

select Med_Name

from Medicine

where Price between 300 and 500;

- WHERE clause with range operator (BETWEEN): It can be used for range of dates, numeric values. Similar to AND condition but for single field.

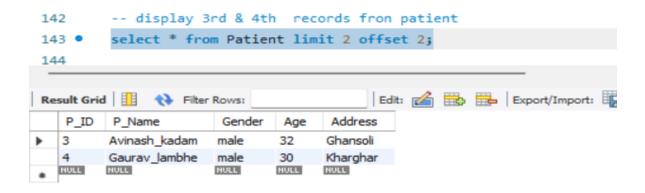


Que.3. display 3rd & 4th records from patient

Query:

select * from Patient limit 2 offset 2;

- Limit and offset are clause used in conjunction with the select statement to control the number of rows returned by a query and skip a certain number of rows respectively.

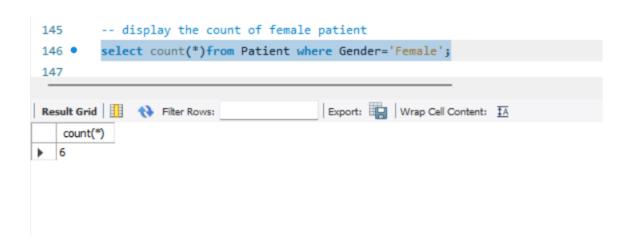


Que.4. display the count of female patient

Query:

select count(*)from Patient where Gender='Female';

- Count query is a single value, which is the count of rows or values that match the specified criteria.

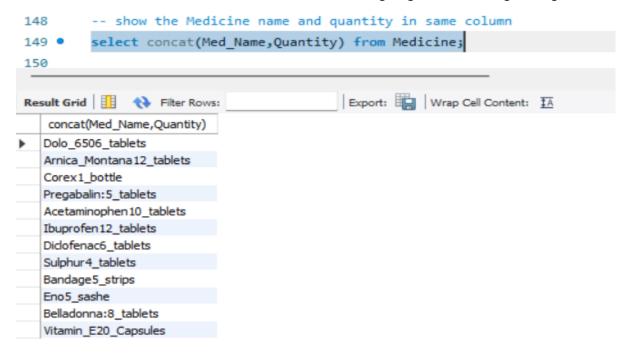


Que.5. show the Medicine name and quantity in same column.

Query:

select concat(Med_Name,Quantity) from Medicine;

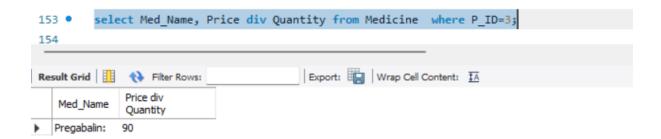
- concat function is used to combine two or more strings together into a single string.



Que.6.calculate the one pregabalin tablet price

Query:

select Med_Name, Price div Quantity from Medicine where P_ID=3;



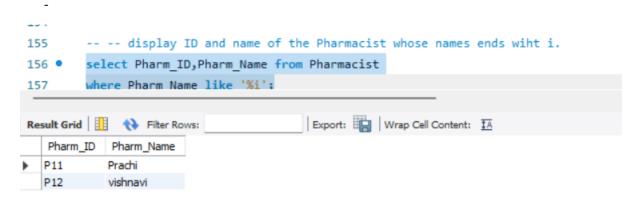
Que.7. display ID and name of the Pharmacist whose names ends with 'I'

Query:

select Pharm_ID,Pharm_Name from Pharmacist

where Pharm Name like '%i';

- WHERE clause with LIKE operator: It is used when we want to select rows to display that are similar to another field or constant. It is used with % (percentage) or _ (underscore) for character data types. % represent many, _ represent single character.

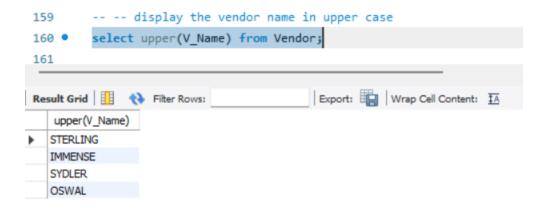


Que.8. display the vendor name in upper case

Query

select upper(V_Name) from Vendor;

- **UPPER:** converts all the characters to Uppercase

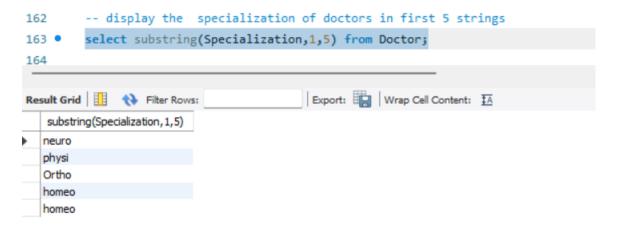


Que.9. display the specialization of doctors in first 5 strings

Query:

select substring(Specialization, 1,5) from Doctor;

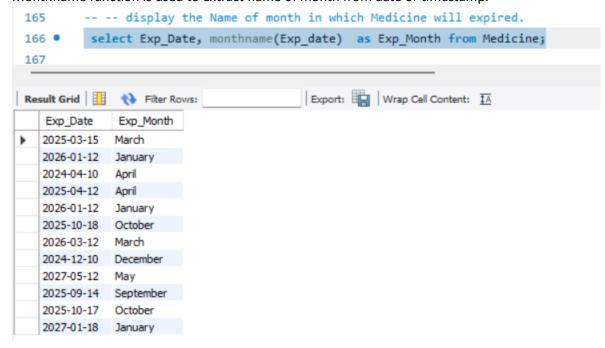
- Substring is used to extrsct position of a string ,it allows to specify the position and length of substring to extract from given string.



Que.10. display the Name of month in which Medicine will expired.

Query: select Exp_Date, monthname(Exp_date) as Exp_Month from Medicine;

- Monthname function is used to extract name of month from date or timestamp.

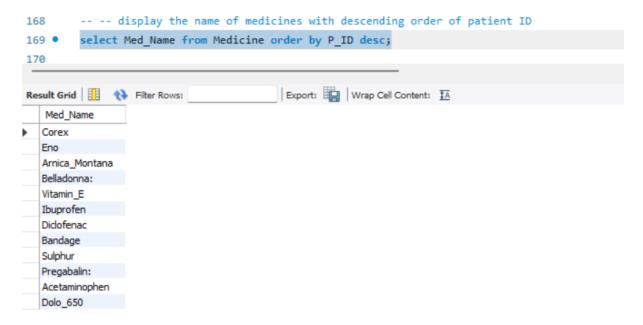


Que.11. display the name of medicines with descending order of patient ID

Query:

select Med_Name from Medicine order by P_ID desc;

- Order by clause is used to sort the result set of select statement based on one or more columns in ascending or descending order.

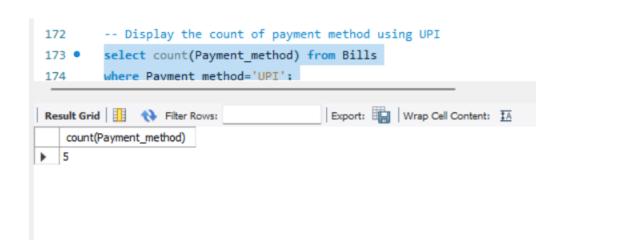


Que.12. Display the count of payment method using UPI

Query:

select count(Payment_method) from Bills

where Payment_method='UPI';

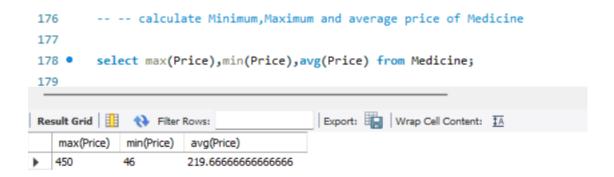


Que.13. calculate Minimum, Maximum and average price of Medicine

Query:

select max(Price),min(Price),avg(Price) from Medicine;

- MIN,MAX AND AVG functions are used to perform calculations on numeric columns in a database table.

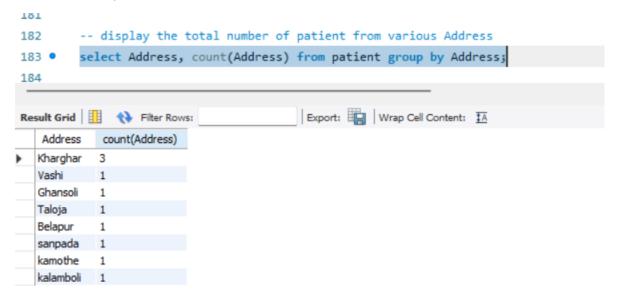


Que.14. display the total number or count of patient from various Address

Query:

select Address, count(Address) from patient group by Address;

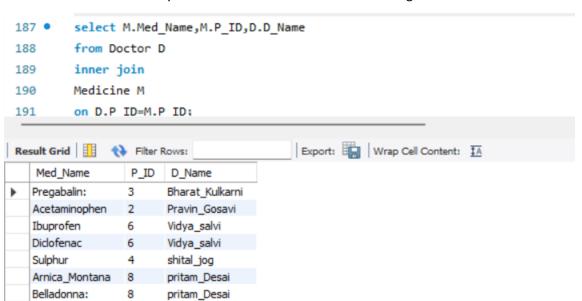
- Group by clausebis used to group rows with similar values in one or more columns into summary rows.



Que.15.Display name medicine which are prescibe by doctor

Query: select M.Med_Name,M.P_ID,D.D_Name
from Doctor D
inner join
Medicine M
on D.P_ID=M.P_ID;

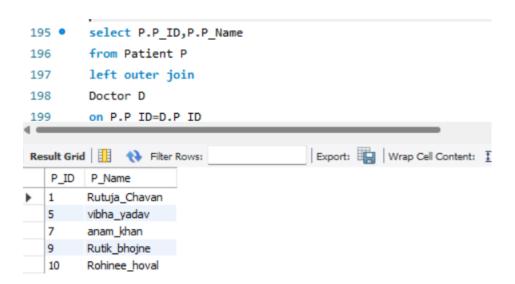
- The INNER JOIN keyword selects records that have matching values in both tables.



Que.16.display name of patient who not prescibe by doctor

```
Query:
select P.P_ID,P.P_Name
from Patient P
left outer join
Doctor D
on P.P_ID=D.P_ID
where D.P_ID is null;
```

 The LEFT JOIN keyword returns all records from the left table (table1), and the matching records from the right table (table2). The result is 0 records from the right side, if there is no match.



Que.17.display the name of medicines which are supplied by vendors

Query: select M.Med_ID,M.Med_Name

from Medicine M

right outer join

Vendor V

on M.Med_Id=V.Med_ID;

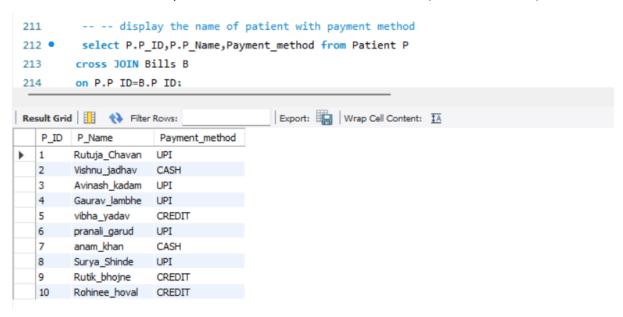
- The RIGHT JOIN keyword returns all records from the right table (table2), and the matching records from the left table (table1). The result is 0 records from the left side, if there is no match.



Que.18. display the name of patient with payment method

Query: select P.P_ID,P.P_Name,Payment_method from Patient P cross JOIN Bills B on P.P_ID=B.P_ID;

- The CROSS JOIN keyword returns all records from both tables (table1 and table2).

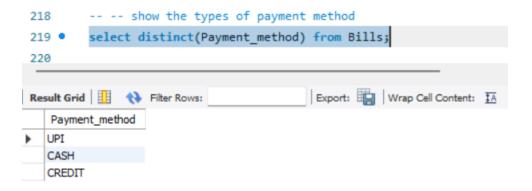


Que.19. show the types of payment method

Query:

select distinct(Payment_method) from Bills;

- The SELECT DISTINCT statement is used to return only distinct (different) values.



Que.20. display the how many days remains to expire 'eno'

Query:

SELECT DATEDIFF('2025-09-14', '2023-02-28') AS days_difference;

- The DATEDIFF() function returns the difference between two dates.

Que.21 display average price of medicine with medicine name whose price greater than 100

Query: SELECT Med_Name, AVG(Price) AS avg_Price

FROM Medicine

GROUP BY Med_Name

HAVING AVG(Price) > 100;

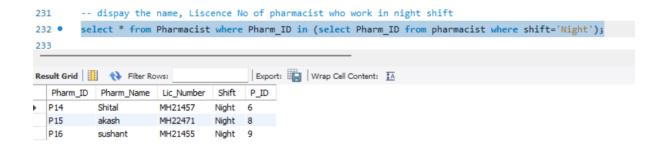
- The GROUP BY statement groups rows that have the same values into summary rows, like "find the number of customers in each country".
- The HAVING clause was added to SQL because the WHERE keyword cannot be used with aggregate functions.



Que.22 display the name, Liscence No of pharmacist who work in night shift

Query:

select * from Pharmacist where Pharm_ID in (select Pharm_ID from pharmacist where shift='Night');

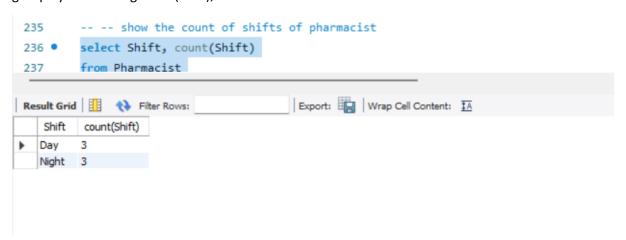


Que.23.show the count of shifts of pharmacist

Query: select Shift, count(Shift)

from Pharmacist

group by Shift having count(Shift);



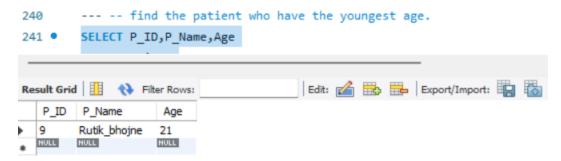
Que.24. find the patient who have the youngest age.

Query:

SELECT P_ID,P_Name,Age

FROM Patient

WHERE Age = (SELECT MIN(Age) FROM Patient);



Que.25. retrieve a list of medicines and the doctors who prescribe them

Query:

SELECT M.Med_Name,D.D_Name

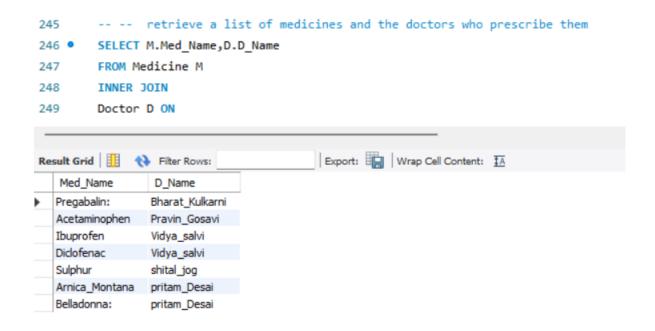
FROM Medicine M

INNER JOIN

Doctor D ON

 $M.P_ID = D.P_ID;$

- The INNER JOIN keyword selects records that have matching values in both tables.



Que.26. write a query to retrieves all medicines and the pharmacists who dispense them.

Query:

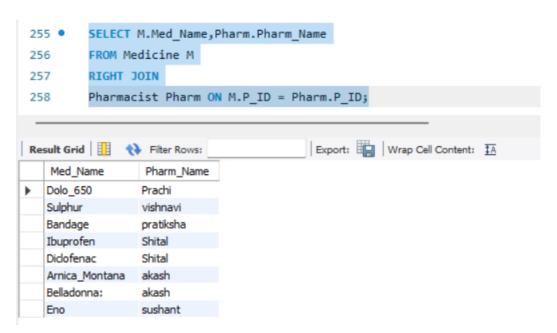
SELECT M.Med_Name,Pharm_Pharm_Name

FROM Medicine M

RIGHT JOIN

Pharmacist Pharm ON M.P_ID = Pharm.P_ID;

- The RIGHT JOIN keyword returns all records from the right table (table2), and the matching records from the left table (table1). The result is 0 records from the left side, if there is no match.



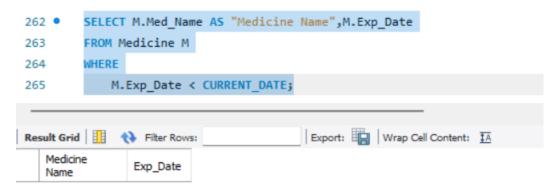
Que.27. write a query will retrieve medicines with expired expiry dates:

Query:

SELECT M.Med_Name AS "Medicine Name",M.Exp_Date

FROM Medicine M WHERE

M.Exp_Date < CURRENT_DATE;</pre>



Que.28. Display count the number of patients assigned to each doctor:

```
Query:

SELECT D.D_Name AS "Doctor Name",

COUNT(P.P_ID) AS "Number of Patients"

FROM Doctor D

LEFT JOIN

Patient P ON D.P_ID = P.P_ID

GROUP BY D.D_Name;
```

- The LEFT JOIN keyword returns all records from the left table (table1), and the matching records from the right table (table2). The result is 0 records from the right side, if there is no match.

