



MID LAB



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FA-BSE-060

Section:

B 'Software Engineering'

Department:

Computer Science

SECTION A:

- 1) Retrieve the list of all medicines that belong to the category 'Antibiotic'.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'MedicalStore' database which contains tables like 'Medicines', 'Customers', 'Doctors', etc. The central pane displays a T-SQL query:

```
use MedicalStore;
SELECT medicine_name, category
FROM Medicines
WHERE category = 'Antibiotic';
```

The results pane shows the output of the query:

medicine_name	category
Panadol	Antibiotic
Augmentin	Antibiotic
Amoxicillin	Antibiotic

A status bar at the bottom indicates "Query executed successfully." and "3 rows".

- 2) Display the name and price of all medicines whose price is greater than 100.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure, including the 'MedicalStore' database which contains tables like 'Medicines', 'Customers', 'Doctors', etc. The central pane displays a T-SQL query:

```
SELECT medicine_name, price
FROM Medicines
WHERE price > 100;
```

The results pane shows the output of the query:

medicine_name	price
Augmentin	150.00
Brufen	120.00
Amoxicillin	200.00

- 3) List all suppliers whose company name starts with the letter 'M' using the LIKE operator.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMIKHAN'. The central pane displays a query window with the following SQL code:

```
SELECT supplier_name, company_name
FROM Suppliers
WHERE company_name LIKE 'M%';
```

The results pane shows the output of the query:

supplier_name	company_name
Ali Traders	MediHealth
Bilal Pharma	Medlife
Naveed Suppliers	MaxMed

- 4) Show all medicines where the stock quantity is between 10 and 100.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMIKHAN'. The central pane displays a query window with the following SQL code:

```
SELECT medicine_name, stock_quantity
FROM Medicines
WHERE stock_quantity BETWEEN 10 AND 100;
```

The results pane shows the output of the query:

medicine_name	stock_quantity
Panadol	90
Augmentin	60
Brufen	30
Disprin	50
Amoxicillin	20

- 5) Display the medicine name and its total stock value (price × stock quantity) using an arithmetic expression.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMI_KHAN'. The 'Tables' node under 'MedicalStore' contains 'Medicines'. A query window titled 'SQLQuery1.sql - \$...han\Samikhhan (53)*' displays the following SQL code:

```
SELECT
    medicine_name,
    price,
    stock_quantity,
    (price * stock_quantity) AS total_stock_value
FROM Medicines;
```

The results pane shows the output of the query:

	medicine_name	price	stock_quantity	total_stock_value
1	Panadol	50.00	80	4000.00
2	Augmentin	150.00	60	9000.00
3	Brufen	120.00	30	3600.00
4	Dispirin	90.00	50	4500.00
5	Amoxicillin	200.00	20	4000.00

Section _B

6. Find the average price of all medicines in the database

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMI_KHAN'. The 'Tables' node under 'MedicalStore' contains 'Medicines'. A query window titled 'SQLQuery1.sql - \$...han\Samikhhan (53)*' displays the following SQL code:

```
SELECT AVG(price) AS Average_Price
FROM Medicines;
```

The results pane shows the output of the query:

Average_Price
122.000000

7. Display the total number of orders placed by each customer.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMI_KHAN'. The central pane displays a T-SQL query:

```
SELECT c.customer_name, COUNT(o.order_id) AS Total_Orders
FROM Customers c
JOIN Orders o ON c.customer_id = o.customer_id
GROUP BY c.customer_name;
```

The results pane shows the output of the query:

customer_name	Total_Orders
Ahmed Khan	1
Ali Raza	1
Sara Malik	1

8. Find the maximum and minimum stock quantity among all medicines.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMI_KHAN'. The central pane displays a T-SQL query:

```
SELECT
    MAX(stock_quantity) AS Maximum_Stock,
    MIN(stock_quantity) AS Minimum_Stock
FROM Medicines;
```

The results pane shows the output of the query:

Maximum_Stock	Minimum_Stock
80	20

9. Display the supplier name and the length of the company name using a string function.

SQLQuery1.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

```

SELECT
    supplier_name,
    company_name,
    LEN(company_name) AS CompanyName_Length
FROM Suppliers;
  
```

Results

supplier_name	company_name	CompanyName_Length
All Traders	MedHealth	10
Bilal Pharma	Medlife	8
Naveed Suppliers	MaxMed	6

10. Show the month name and total sales amount for each month from the Orders table.

SQLQuery1.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

```

SELECT
    DATENAME(MONTH, order_date) AS Month_Name,
    SUM(total_amount) AS Total_Sales
FROM Orders
GROUP BY DATENAME(MONTH, order_date);
  
```

Results

Month_Name	Total_Sales
October	12500

Section_C

11. Display each order along with the customer's name and contact number who placed it.

SQLQuery1.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

```

SELECT
    o.order_id,
    c.customer_name,
    c.contact_number,
    o.order_date,
    o.total_amount
FROM Orders o
JOIN Customers c ON o.customer_id = c.customer_id;

```

Results

order_id	customer_name	contact_number	order_date	total_amount
1	Ahmed Khan	03001234567	2025-10-01	500.00
2	Sara Malik	03111234567	2025-10-05	300.00
3	Ali Raza	03219876543	2025-10-10	450.00

12. List all order items with medicine name and corresponding unit prices.

SQLQuery1.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

```

SELECT
    oi.order_item_id,
    m.medicine_name,
    oi.unit_price,
    oi.quantity
FROM OrderItems oi
JOIN Medicines m ON oi.medicine_id = m.medicine_id;

```

Results

order_item_id	medicine_name	unit_price	quantity
1	Panadol	50.00	5
2	Brufen	120.00	2
3	Augmentin	150.00	2
4	Disprin	90.00	3

13. Retrieve the customer name, doctor name, and medicine prescribed for every prescription.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the 'MedicalStore' database is selected. In the center pane, a query window displays the following SQL code:

```
SELECT
    c.customer_name,
    d.doctor_name,
    m.medicine_name
FROM Prescriptions p
JOIN Customers c ON p.customer_id = c.customer_id
JOIN Doctors d ON p.doctor_id = d.doctor_id
JOIN Medicines m ON p.medicine_id = m.medicine_id;
```

The results pane shows the output of the query:

	customer_name	doctor_name	medicine_name
1	Ahmed Khan	Dr. Hamid	Panadol
2	Sara Malik	Dr. Sana	Brufen
3	Ali Raza	Dr. Aef	Augmentin

14. Show the list of orders with their payment method and payment status.

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the 'MedicalStore' database is selected. In the center pane, a query window displays the following SQL code:

```
SELECT
    order_id,
    payment_method,
    payment_status
FROM Orders;
```

The results pane shows the output of the query:

	order_id	payment_method	payment_status
1	1	Cash	Paid
2	2	Card	Pending
3	3	Cash	Paid

15. Display all customers who have placed at least one order, including the total number of medicines ordered.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMI_KHAN'. The central pane displays a query window with the following SQL code:

```
SELECT
    c.customer_name,
    COUNT(oi.medicine_id) AS Total_Medicines_Ordered
FROM Customers c
JOIN Orders o ON c.customer_id = o.customer_id
JOIN OrderItems oi ON o.order_id = oi.order_id
GROUP BY c.customer_name;
```

The results pane shows the output of the query:

customer_name	Total_Medicines_Ordered
Ahmed Khan	2
Ali Raza	1
Sara Malik	1

Section_E

16. Retrieve the medicines with prices not equal to 50 using the appropriate operator.

The screenshot shows the Microsoft SQL Server Management Studio interface. The Object Explorer on the left shows the database structure for 'SAMI_KHAN'. The central pane displays a query window with the following SQL code:

```
SELECT medicine_name, price
FROM Medicines
WHERE price <> 50;
```

The results pane shows the output of the query:

medicine_name	price
Augmentin	150.00
Brufen	120.00
Disprin	90.00
Anoxicillin	200.00
Paracetamol	40.00
Penicillin	70.00
Zentel	120.00
Cough-X	80.00
Paracetamol	40.00
Penicillin	70.00
Zentel	120.00

17. Display all orders whose status is either 'PENDING' or 'PAID'.

SQLQuery1.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

```
SELECT order_id, customer_id, payment_status, total_amount
FROM Orders
WHERE payment_status IN ('PENDING', 'PAID');
```

Results

order_id	customer_id	payment_status	total_amount
1	1	Paid	500.00
2	2	Pending	300.00
3	3	Paid	450.00

18. Show all orders that were placed in the month of October 2025.

SQLQuery1.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

```
SELECT order_id, customer_id, order_date, total_amount
FROM Orders
WHERE YEAR(order_date) = 2025 AND MONTH(order_date) = 10;
```

Results

order_id	customer_id	order_date	total_amount
1	1	2025-10-01	500.00
2	2	2025-10-05	300.00
3	3	2025-10-10	450.00

19. Retrieve the customer names and their total amount spent where total spending is greater than 500.

SQLQuery1.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

MedicalStore Execute

Object Explorer

SAMI_KHAN (SQL Server 14.0.2085)

Databases

System Databases

Database Snapshots

Dream_home

DreamHome

DreamHomeLease

HotelMS

lab3

Medical_Store_MS

MedicalStore

Database Diagrams

Tables

System Tables

FileTables

External Tables

Graph Tables

dbo.Customers

dbo.Doctors

dbo.Medicines

dbo.OrderItems

dbo.Orders

dbo.Prescriptions

dbo.Suppliers

Views

External Resources

Synonyms

Programmability

SQLQuery1.sql - ...han\SamiKhan (53)*

```
SELECT
    c.customer_name,
    SUM(o.total_amount) AS Total_Spent
FROM Customers c
JOIN Orders o ON c.customer_id = o.customer_id
GROUP BY c.customer_name
HAVING SUM(o.total_amount) > 100;
```

Results Messages

customer_name	Total_Spent
Ahmed Khan	500.00
Ali Raza	450.00
Sara Malik	300.00

20. List all customers whose email address contains ‘gmail.com’.

LAB-MID.sql - SAMI_KHAN.MedicalStore (Sami_Khan\SamiKhan (53)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

MedicalStore Execute

Object Explorer

SAMI_KHAN (SQL Server 14.0.2085)

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dbo.Customers

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dbo.Suppliers

Views

External Resources

Synonyms

Programmability

LAB-MID.sql - SAM...n\SamiKhan (53)*

```
SELECT customer_name, email
FROM Customers
WHERE email LIKE '%gmail.com%';
```

Results Messages

customer_name	email
Sara Malik	sara43@gmail.com
Sami Khan	sam@gmail.com
Fazal Hussain	fazal@gmail.com