

Report 1: Top 5 Selling Drugs This Month

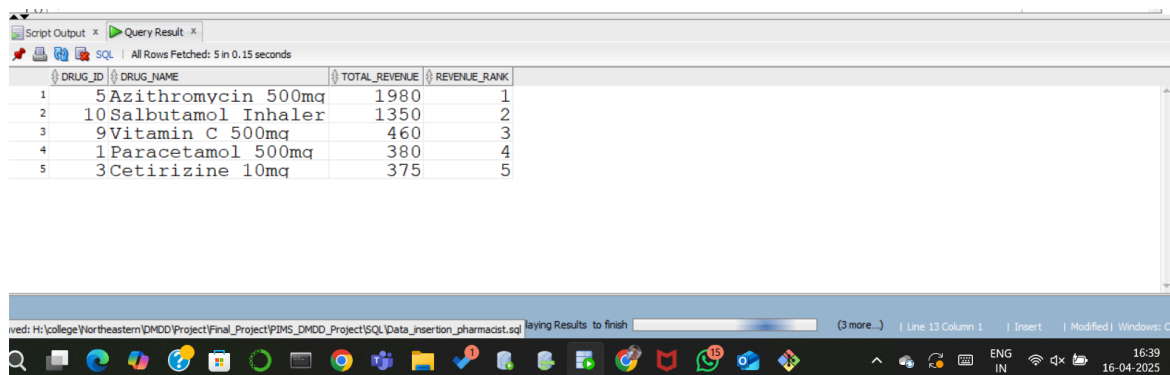
This report identifies the most demanded drugs in the current month based on total sales quantity and revenue. It provides insights into consumer demand trends, helping **pharmacists** maintain optimal stock levels and enabling **admins** to make strategic purchasing decisions.

How it Supports System Automation:

- **Automated inventory optimization:** Helps avoid overstocking or understocking by identifying fast-moving drugs.
- **Business decision-making:** Enables timely restocking and marketing focus on high-revenue products.
- **Efficiency:** Eliminates manual tracking of sales trends across hundreds of transactions.
- **Justification:** One of the core objectives of PIMS is to improve inventory management and reduce wastage by automating insights based on real-time data.

Script:

```
SELECT *
FROM (
  SELECT
    d.drug_id,
    d.drug_name,
    SUM(st.total_price) AS total_revenue,
    RANK() OVER (ORDER BY SUM(st.total_price) DESC) AS revenue_rank
  FROM drugs d
  JOIN sales_transactions st ON d.drug_id = st.drugs_drug_id
  GROUP BY d.drug_id, d.drug_name
)
WHERE revenue_rank <= 5;
```



The screenshot shows a SQL query result in a database management tool. The query is executed, and the results are displayed in a table with 4 columns: DRUG_ID, DRUG_NAME, TOTAL_REVENUE, and REVENUE_RANK. The results are sorted by revenue rank in descending order, showing the top 5 drugs.

	DRUG_ID	DRUG_NAME	TOTAL_REVENUE	REVENUE_RANK
1	5	Azithromycin 500mq	1980	1
2	10	Salbutamol Inhaler	1350	2
3	9	Vitamin C 500mq	460	3
4	1	Paracetamol 500mq	380	4
5	3	Cetirizine 10mq	375	5

Report 2 : Drugs Near Expiry But Still In Stock

Purpose of the Report:

This report highlights drugs that are due to expire within the next 60 days but still have available stock. It helps pharmacists and administrators take proactive action to either use, return, or discount these medications before they become unusable.

How it Supports System Automation:

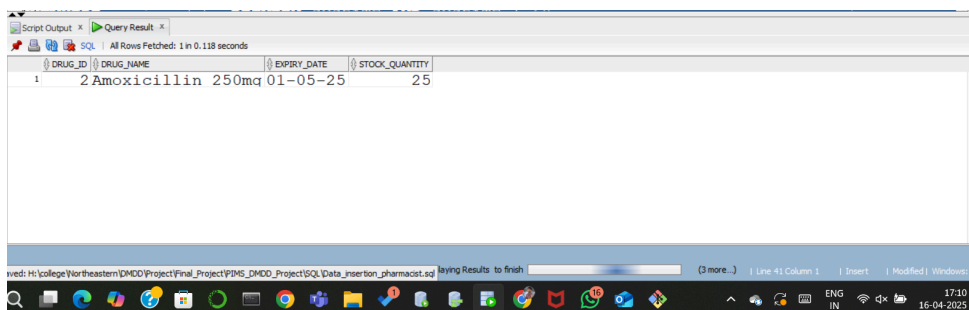
- **Expiry-based stock prioritization:** Automatically flags drugs nearing expiration, avoiding manual expiry checks.
- **Proactive stock clearance:** Aids in planning clearance sales, return to suppliers, or internal prioritization.
- **Reduced wastage:** Minimizes the risk of holding unsellable inventory due to expired products.

Justification:

One of the critical goals of PIMS is to **minimize drug wastage and financial loss** by automating lifecycle tracking of pharmaceutical inventory. This report enables **real-time monitoring** of expiry-sensitive stock, making the system safer, more efficient, and regulation-compliant.

Script:

```
SELECT
    drug_id,
    drug_name,
    expiry_date,
    stock_quantity
FROM drugs
WHERE expiry_date BETWEEN SYSDATE AND SYSDATE + 60
    AND stock_quantity > 0
ORDER BY expiry_date ASC;
```



The screenshot shows a SQL query result window with the following data:

DRUG_ID	DRUG_NAME	EXPIRY_DATE	STOCK_QUANTITY
2	Amoxicillin 250mg	01-05-25	25

Report 3 : Supplier Performance by Sales Impact

Purpose of the Report:

Ranks suppliers based on the cumulative sales of the drugs they provide.

```

SELECT
    s.Supplier_ID,
    s.Supplier_Name,
    SUM(st.Total_Price) AS Total_Revenue_Contributed,
    COUNT(DISTINCT d.Drug_ID) AS Total_Drugs_Supplied
FROM
    Suppliers s
JOIN
    Drugs d ON s.Supplier_ID = d.Suppliers_Supplier_ID
JOIN
    Sales_Transactions st ON d.Drug_ID = st.Drugs_Drug_ID
GROUP BY
    s.Supplier_ID, s.Supplier_Name
ORDER BY
    Total_Revenue_Contributed DESC;

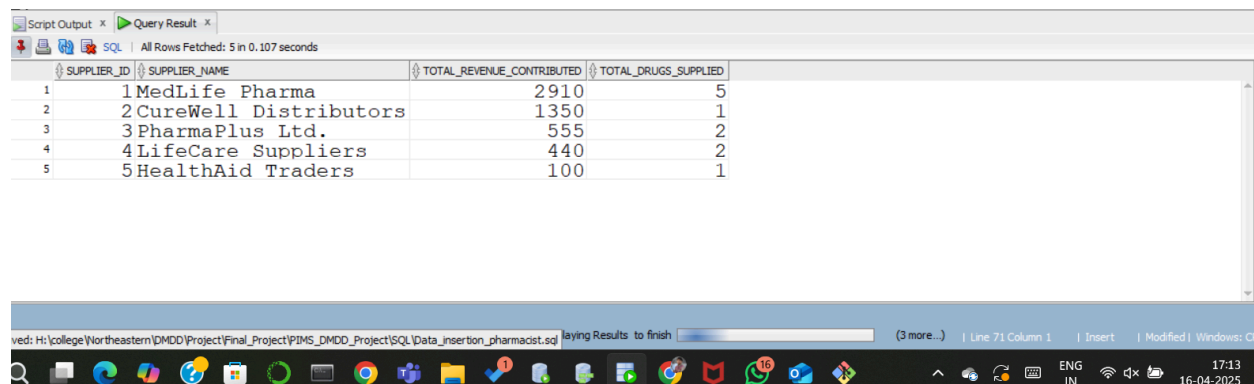
```

How it Supports System Automation:

- Identifies high-performing suppliers for procurement strategy.
- Enables data-driven negotiation and supplier prioritization.

Justification:

PIMS enhances **procurement intelligence** by automating sales-to-supplier correlation—helping reduce costs and ensure availability of top-selling medications.



SUPPLIER_ID	SUPPLIER_NAME	TOTAL_REVENUE_CONTRIBUTED	TOTAL_DRUGS_SUPPLIED
1	MedLife Pharma	2910	5
2	CureWell Distributors	1350	1
3	PharmaPlus Ltd.	555	2
4	LifeCare Suppliers	440	2
5	HealthAid Traders	100	1

Report 4 : Revenue Contribution by Drug Category

Purpose of the Report:

Shows how much revenue is generated by each drug category. This helps prioritize investment in high-revenue product segments.

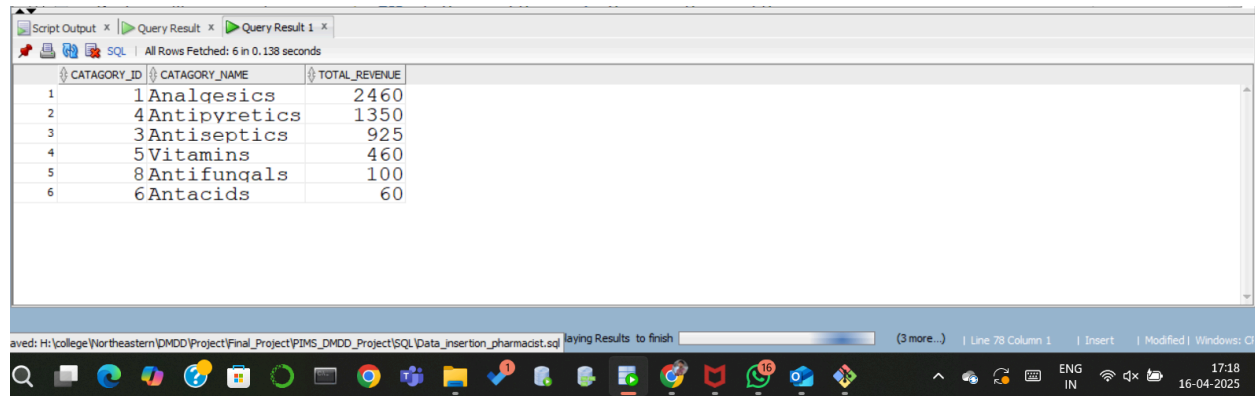
```
SELECT
    c.Catagory_ID,
    c.Catagory_Name,
    ROUND(SUM(st.Total_Price), 2) AS Total_Revenue
FROM
    Drugs d
JOIN
    Catagory c ON d.Catagory_Catagory_ID = c.Catagory_ID
JOIN
    Sales_Transactions st ON d.Drug_ID = st.Drugs_Drug_ID
GROUP BY
    c.Catagory_ID, c.Catagory_Name
ORDER BY
    Total_Revenue DESC;
```

How it Supports System Automation:

- Highlights profitable categories for focused marketing or restocking.
- Automates category-level revenue tracking without manual reports.

Justification:

Aligns with PIMS's goal to **enhance strategic inventory and sales planning** by automating revenue analysis at the category level.



The screenshot shows a SQL query result window with a table containing 6 rows of data. The table has three columns: CATEGORY_ID, CATEGORY_NAME, and TOTAL_REVENUE. The data is as follows:

CATEGORY_ID	CATEGORY_NAME	TOTAL_REVENUE
1	Analgesics	2460
2	Antipyretics	1350
3	Antiseptics	925
4	Vitamins	460
5	Antifungals	100
6	Antacids	60

The window title bar indicates the file path: H:\college\Northeastern\DMDD\Project\Final_Project\PIMS_DMDD_Project\SQL\Data_insertion_pharmacist.sql. The status bar at the bottom shows the date and time: 16-04-2025, 17:18.

Report 5 : Doctor-wise Revenue Generation

Purpose of the Report:

Displays how much revenue has been generated from prescriptions issued by each doctor. This helps evaluate doctor engagement and their indirect contribution to pharmacy sales.

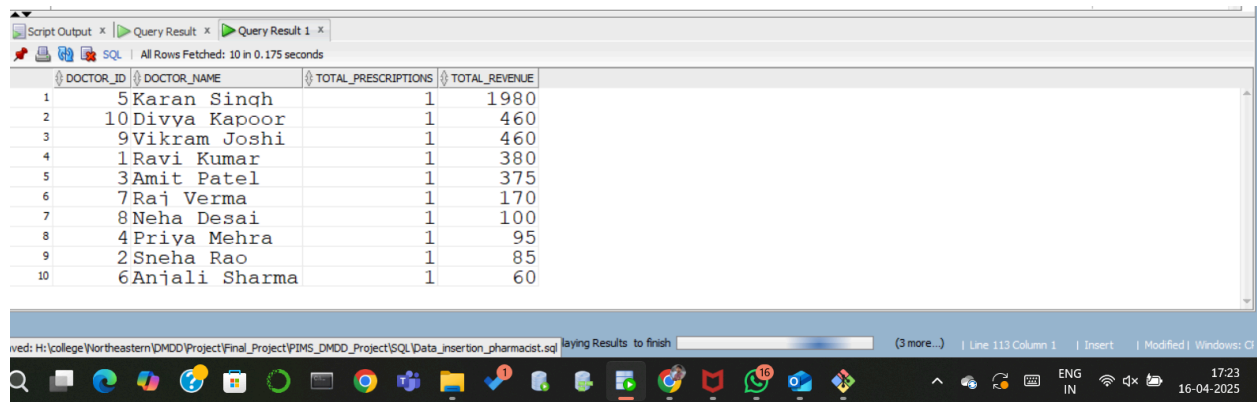
```
SELECT
    d.Doctor_ID,
    d.Doctor_First_Name || ' ' || d.Doctor_Last_Name AS Doctor_Name,
    COUNT(DISTINCT p.Prescription_ID) AS Total_Prescriptions,
    SUM(st.Total_Price) AS Total_Revenue
FROM
    Doctors d
JOIN
    Prescriptions p ON d.Doctor_ID = p.Doctors_Doctor_ID
JOIN
    Prescription_Drugs pd ON p.Prescription_ID =
pd.Prescriptions_Prescription_ID
JOIN
    Sales_Transactions st ON pd.Drugs_Drug_ID = st.Drugs_Drug_ID
WHERE
    st.DATE_TIMESTAMP >= ADD_MONTHS(SYSDATE, -3)
GROUP BY
    d.Doctor_ID, d.Doctor_First_Name, d.Doctor_Last_Name
ORDER BY
    Total_Revenue DESC;
```

How it Supports System Automation:

- Identifies high-impact doctors for partnerships or loyalty programs.
- Automates performance tracking without requiring manual analytics.

Justification:

Aligns with PIMS's objective to **enhance sales tracking** and build data-backed engagement strategies with prescribing doctors.



	DOCTOR_ID	DOCTOR_NAME	TOTAL_PRESCRIPTIONS	TOTAL_REVENUE
1	5	Karan Singh	1	1980
2	10	Divya Kapoor	1	460
3	9	Vikram Joshi	1	460
4	1	Ravi Kumar	1	380
5	3	Amit Patel	1	375
6	7	Raj Verma	1	170
7	8	Neha Desai	1	100
8	4	Priya Mehra	1	95
9	2	Sneha Rao	1	85
10	6	Anjali Sharma	1	60