Answers in form of Query of SQL : -

1. **Retrieve the total number of orders placed**:
   Count the unique `Transaction ID` to find the total number of orders.
   Formula: `COUNT(Transaction ID)`
2. **Calculate the total revenue generated from sales**:
   Multiply `Units Sold` by `Price Per Unit` and sum the results.
   Formula: `SUM(Units Sold * Price Per Unit)`
3. **Identify the highest-priced mobile model**:
   Find the maximum value in the `Price Per Unit` column.
   Formula: `MAX(Price Per Unit)`
   Additional Step: Retrieve the corresponding `Mobile Model`.

Identify the most common mobile model ordered:
Group data by `Mobile Model` and find the model with the highest `Units Sold`.
Formula:
sql
Copy code

```
SELECT Mobile Model, SUM(Units Sold) AS Total_Quantity
FROM Sales
GROUP BY Mobile Model
ORDER BY Total_Quantity DESC
LIMIT 1
```

4.

List the top 5 most ordered mobile models along with their quantities:
Formula:
sql
Copy code

```
SELECT Mobile Model, SUM(Units Sold) AS Total_Quantity
FROM Sales
GROUP BY Mobile Model
ORDER BY Total_Quantity DESC
LIMIT 5
```

5.

Intermediate Analysis

Find the total quantity of each mobile brand ordered:
Formula:
sql

Copy code

```
SELECT Brand, SUM(Units Sold) AS Total_Quantity
FROM Sales
GROUP BY Brand
```

1.

Distribution of orders by hour of the day:
Extract the hour from the `Order Timestamp` (if available) and group the data.
Formula:
sql
Copy code

```
SELECT HOUR(Order_Timestamp) AS Order_Hour, COUNT(*) AS Order_Count
FROM Sales
GROUP BY Order_Hour
ORDER BY Order_Hour
```

2.

Category-wise distribution of mobiles:
If a `Category` column exists, group data by `Category` and sum `Units Sold`.
Formula:
sql
Copy code

```
SELECT Category, SUM(Units Sold) AS Total_Quantity
FROM Sales
GROUP BY Category
```

3.

Group orders by date and calculate the average number of mobiles ordered per day:
Formula:
sql
Copy code

```
SELECT Order_Date, AVG(Units Sold) AS Avg_Units_Per_Day
FROM Sales
GROUP BY Order_Date
```

4.

Determine the top 3 most ordered mobile models based on revenue:
Formula:
sql
Copy code

```
SELECT Mobile Model, SUM(Units Sold * Price Per Unit) AS
Total_Revenue
```

```
FROM Sales
GROUP BY Mobile Model
ORDER BY Total_Revenue DESC
LIMIT 3
```

5.

Advanced Analysis

Percentage contribution of each mobile model to total revenue:
Formula:
sql
Copy code

```
SELECT Mobile Model,
       SUM(Units Sold * Price Per Unit) / (SELECT SUM(Units Sold *
Price Per Unit) FROM Sales) * 100 AS Revenue_Percentage
FROM Sales
GROUP BY Mobile Model
```

1.

Cumulative revenue generated over time:
Calculate the running total of revenue grouped by `Date`.
Formula:
sql
Copy code

```
SELECT Order_Date,
       SUM(Units Sold * Price Per Unit) OVER (ORDER BY Order_Date)
AS Cumulative_Revenue
FROM Sales
```

2.

Top 3 most ordered mobile models by revenue for each category:
Formula:
sql
Copy code

```
SELECT Category, Mobile Model,
       SUM(Units Sold * Price Per Unit) AS Total_Revenue
FROM Sales
GROUP BY Category, Mobile Model
ORDER BY Category, Total_Revenue DESC
```

3. `LIMIT 3`