Ques-1 Identify the most selling subcategory and product: Order and Value Wise

```
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      1   -- Most Selling Subcategory (Order Count)
      2   SELECT Sub_Category, COUNT(Order_ID) AS OrderCount
      3   FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
      4   GROUP BY Sub_Category
      5   ORDER BY OrderCount DESC
      6   LIMIT 1;
      7
      8
```

Query results

| Job information | **Results** | Chart | JSON | Execution details |

Row	Sub_Category ▾	OrderCount ▾	
1	Art	1152	

```
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    1   -- Most Selling Subcategory (Total Sales)
    2   SELECT Sub_Category, SUM(Sales) AS TotalSales
    3   FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
    4   GROUP BY Sub_Category
    5   ORDER BY TotalSales DESC
    6   LIMIT 1;
    7
```

Query results

| Job information | **Results** | Chart | JSON | Execution details | Exec |

Row	Sub_Category ▾	TotalSales ▾	
1	Bookcases	294396.0	

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```
1  -- Most Selling Product (Order Count)
2  SELECT Product_Name, COUNT(Order_ID) AS OrderCount
3  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
4  GROUP BY Product_Name
5  ORDER BY OrderCount DESC
6  LIMIT 1;
```

Query results

Job information   **Results**   Chart   JSON   Execution details

ow	Product_Name ▾	OrderCount ▾
1	Eldon File Cart Single Width	26

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```
1  -- Most Profitable Product
2  SELECT Product_Name, SUM(Profit) AS TotalProfit
3  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
4  GROUP BY Product_Name
5  ORDER BY TotalProfit DESC
6  LIMIT 1;
```

Query results

Job information   **Results**   Chart   JSON   Execution details

Row	Product_Name ▾	TotalProfit ▾
1	Nokia Smart Phone Full Size	7351.0

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```sql
1  -- Most Profitable Subcategory
2  SELECT Sub_Category, SUM(Profit) AS TotalProfit
3  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
4  GROUP BY Sub_Category
5  ORDER BY TotalProfit DESC
6  LIMIT 1;
```

Query results

Job information | **Results** | Chart | JSON | Execution details | Exec

Row	Sub_Category ▾	TotalProfit ▾
1	Copiers	43083.0

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```sql
1
2  -- Most Selling Product (Total Sales)
3  SELECT Product_Name, SUM(Sales) AS TotalSales
4  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
5  GROUP BY Product_Name
6  ORDER BY TotalSales DESC
7  LIMIT 1;
```

Query results

Job information | **Results** | Chart | JSON | Execution details

Row	Product_Name ▾	TotalSales ▾
1	Nokia Smart Phone Full Size	30645.0

Ques 2- Categories and products contributing maximum to profit? How we can maximise profit?

```
1
2   -- Top Profit Product
3   SELECT Product_Name, SUM(Profit) AS TotalProfit
4   FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
5   GROUP BY Product_Name
6   ORDER BY TotalProfit DESC
7   LIMIT 1;
```

Query results

| Job information | **Results** | Chart | JSON | Execution details |

Row	Product_Name ▾	TotalProfit ▾
1	Nokia Smart Phone Full Size	7351.0

```
1
2   -- Top Profit Category
3   SELECT Category, SUM(Profit) AS TotalProfit
4   FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
5   GROUP BY Category
6   ORDER BY TotalProfit DESC
7   LIMIT 1;
```

Query results

| Job information | **Results** | Chart | JSON | Execution details |

	Category ▾	TotalProfit ▾
1	Office Supplies	136270.0

Ques 3- How profit %age moved MoM and QoQ?

```sql
1   -- QoQ Profit % Change
2   WITH QuarterlyProfit AS (
3     SELECT
4       EXTRACT(YEAR FROM Date) AS Year,
5       EXTRACT(QUARTER FROM Date) AS Quarter,
6       SUM(Profit) AS TotalProfit
7     FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
8     GROUP BY Year, Quarter
9   )
10  SELECT
11    Year,
12    Quarter,
13    TotalProfit,
14    (TotalProfit - LAG(TotalProfit) OVER (ORDER BY Year, Quarter)) / LAG(TotalProfit) OVER (ORDER BY Year, Quarter) * 100 AS QoQ_PercentChange
15  FROM QuarterlyProfit;
```

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Query results

Job information | **Results** | Chart | JSON | Execution details | Execution graph

Row	Year ▼	Quarter ▼	TotalProfit ▼	QoQ_PercentChange
1	2022	3	54286.0	-0.67514408562...
2	2022	4	61012.0	12.38993478981...
3	2023	1	33373.0	-45.3009244083...
4	2021	4	37606.0	null
5	2022	2	54655.0	1.511858992217...
6	2022	1	53841.0	43.17130245173...

Results per page: 50 ▼   1 – 6 of 6 |< < > >|

```sql
-- MoM Profit % Change
WITH MonthlyProfit AS (
  SELECT
    EXTRACT(YEAR FROM Date) AS Year,
    EXTRACT(MONTH FROM Date) AS Month,
    SUM(Profit) AS TotalProfit
  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
  GROUP BY Year, Month
)
SELECT
  Year,
  Month,
  TotalProfit,
  (TotalProfit - LAG(TotalProfit) OVER (ORDER BY Year, Month)) / LAG(TotalProfit) OVER (ORDER BY Year, Month) * 100 AS MoM_PercentChange
FROM MonthlyProfit;
```

Query results

Job information | **Results** | Chart | JSON | Execution details | Execution graph

	Year ▼	Month ▼	TotalProfit ▼	MoM_PercentChange
1	2022	3	19144.0	54.58656330749...
2	2022	11	19152.0	34.40943224085...
3	2022	9	19062.0	-3.18451927472...
4	2022	10	14249.0	-25.2491868639...
5	2022	7	15535.0	-16.7158097893...
6	2021	12	20347.0	23.50227617602...

Results per page: 200 ▼   1 – 18

Ques 4- Identify the best months and days from profit and Value perspective.

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```
1  -- Best Months (Profit)
2  SELECT
3    EXTRACT(YEAR FROM Date) AS Year,
4    EXTRACT(MONTH FROM Date) AS Month,
5    SUM(Profit) AS TotalProfit
6  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
7  GROUP BY Year, Month
8  ORDER BY TotalProfit DESC
9  LIMIT 5;
10
```

Query results

| Job information | Results | Chart | JSON | Execution details | Exe |

Row	Year ▾	Month ▾	TotalProfit ▾	
1	2022	12	27611.0	
2	2022	1	22313.0	
3	2022	4	21198.0	
4	2021	12	20347.0	
5	2022	8	19689.0	

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```
1  -- Best Days (Profit)
2  SELECT
3    FORMAT_DATE("%A", Date) AS DayOfWeek,
4    SUM(Profit) AS TotalProfit
5  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
6  GROUP BY DayOfWeek
7  ORDER BY TotalProfit DESC
8  LIMIT 1;
```

Query results

| Job information | Results | Chart | JSON | Execution details | Exe |

Row	DayOfWeek ▾	TotalProfit ▾	
1	Wednesday	54257.0	

Ques 5- How profit varied wrt discount? What is the breakeven discount percentage?

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```
1  -- Profit vs. Discount
2  SELECT
3    Discount,
4    SUM(Profit) AS TotalProfit
5  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
6  GROUP BY Discount
7  ORDER BY Discount;
```

Query results

Job information   **Results**   Chart   JSON   Execution details   Execution graph

Row	Discount ▾	TotalProfit ▾
1	0.0	315241.0
2	0.1	91664.0
3	0.15	16628.0
4	0.2	1671.0
5	0.3	-348.0
6	0.35	-6936.0
7	0.4	-17348.0

Results per page: 200 ▾   1 –

Job history

Untitled query   ▶ Run   💾 Save ▾   ⬇ Download   +👤 Share ▾

```
1  -- Breakeven Discount (Profit ≤ 0)
2  SELECT
3    Discount,
4    SUM(Profit) AS TotalProfit
5  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
6  GROUP BY Discount
7  HAVING TotalProfit <= 0
8  ORDER BY Discount;
```

Query results

Job information   **Results**   Chart   JSON   Execution details   Execution graph

Row	Discount ▾	TotalProfit ▾
1	0.3	-348.0
2	0.35	-6936.0
3	0.4	-17348.0
4	0.45	-1104.0
5	0.5	-78922.0
6	0.6	-14395.0

Results per page: 200 ▾

Ques 6-What is the return percentage?

```
1  --Return %
2  SELECT
3    (COUNTIF(Return_Status = 'Returned') / COUNT(Order_ID)) * 100 AS ReturnPercentage
4  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
```

Query results

| Job information | Results | Chart | JSON | Execution details | Execution graph |

Row	ReturnPercentage
1	2.982477942090…

Ques 7- What is the average quantity sold per order?

```
1  --Avg Quantity Sold Per order
2  SELECT AVG(Quantity) AS AvgQuantityPerOrder
3  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`;
```

Query results

| Job information | Results | Chart | JSON | Execution details | Execut |

Row	AvgQuantityPerOrder
1	3.772088977258…

Ques 8- Are there any orders with multiple products?

```sql
1   --Orders with multiple products
2   SELECT Order_ID, COUNT(Product_Name) AS ProductCount
3   FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
4   GROUP BY Order_ID
5   HAVING ProductCount > 1;
```

Query results

Job information | Results | Chart | JSON | Execution details | Execution graph

Row	Order_ID	ProductCount
1	AZ-2013-1201319	3
2	AZ-2011-4452827	2
3	AZ-2014-4362946	2
4	AZ-2013-2566015	6
5	AZ-2014-7956998	4
6	BN-2012-8746032	4
7	AZ-2012-5854289	2

Results per page: 50

Ques 9- What is the weighted discount trend Vs. Sales MoM and QoQ?

```sql
1   -- MoM Weighted Discount
2   WITH MonthlyData AS (
3     SELECT
4       EXTRACT(YEAR FROM Date) AS Year,
5       EXTRACT(MONTH FROM Date) AS Month,
6       SUM(Sales) AS TotalSales,
7       SUM(Discount * Sales) AS TotalDiscountSales
8     FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
9     GROUP BY Year, Month
10  )
11  SELECT
12    Year,
13    Month,
14    (TotalDiscountSales / TotalSales) AS WeightedDiscount,
15    TotalSales
16  FROM MonthlyData
17  ORDER BY Year, Month;
```

Query results

Job information | Results | Chart | JSON | Execution details | Execution graph

ow	Year	Month	WeightedDiscount	TotalSales
1	2021	10	0.112332757876...	4634.0
2	2021	11	0.098392718549...	141730.0
3	2021	12	0.098666459827...	174048.0
4	2022	1	0.099281066969...	147858.0
5	2022	2	0.115111440814	120647.0

Results per page: 50

```
1   -- QoQ Weighted Discount
2   WITH QuarterlyData AS (
3     SELECT
4       EXTRACT(YEAR FROM Date) AS Year,
5       EXTRACT(QUARTER FROM Date) AS Quarter,
6       SUM(Sales) AS TotalSales,
7       SUM(Discount * Sales) AS TotalDiscountSales
8     FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
9     GROUP BY Year, Quarter
10  )
11  SELECT
12    Year,
13    Quarter,
14    (TotalDiscountSales / TotalSales) AS WeightedDiscount,
15    TotalSales
16  FROM QuarterlyData
17  ORDER BY Year, Quarter;
```

Query results

| Job information | Results | Chart | JSON | Execution details | Execution graph |

w	Year ▼	Quarter ▼	WeightedDiscount	TotalSales ▼
1	2021	4	0.098743024605...	320412.0
2	2022	1	0.104876345450...	421699.0
3	2022	2	0.101040185452...	418435.0
4	2022	3	0.094654524625...	412012.0
5	2022	4	0.100458080152	435295.0

Ques 10- If the business call is to reduce the discount what should be the steps?
Steps to reduce discount

Identify products with high discounts but low profit margins. Recommend:

- Gradual discount reduction.
- Promotions for full-price sales.
- Cost negotiation with suppliers.

Ques 11- How many orders got cancelled?

```
1   SELECT COUNTIF(Return_Status = 'Cancelled') AS CancelledOrders
2     FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
3
```

Query results

| Job information | Results | Chart | JSON | Execution details | Execution |

Row	CancelledOrders ▼
1	373

Ques 12- What Impact on profit and discount from the cancelled orders?

```sql
1  --Impact on profit and discount from cancelled orders
2  SELECT
3    SUM(Profit) AS TotalProfitLoss,
4    AVG(Discount) AS AvgDiscount
5  FROM `quixotic-vent-446704-g6.Wellbeing_assignment.WB_assignment`
6  WHERE Return_Status = 'Cancelled';
7
```

Query results

Job information	Results	Chart	JSON	Execution details	Executio

Row	TotalProfitLoss ▼	AvgDiscount ▼	
1	14111.0	0.106434316353…	