# SQL Report

Questions And Answering by Sql
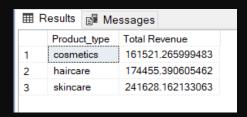
# First Question: Total Of Revenue by Revenue

```
-----Total of Revenue by products-----
select Product_type,sum(Revenue_generated) as 'Total Revenue'
from supply_chain_data
group by Product_type
order by 'Total Revenue'
```

| | Product_type | Total Revenue |
|---|---|---|
| 1 | cosmetics | 161521.265999483 |
| 2 | haircare | 174455.390605462 |
| 3 | skincare | 241628.162133063 |

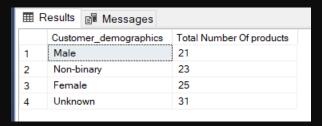The Result show that the most profitable is **Skincare Products**

And the least profitable is **Cosmetics Products**

# Second Question: Effect Of Gender on Products

```
-----Total of Product by Gender-----
select Customer_demographics ,count(Product_type) as 'Total Number Of products'
from supply_chain_data
group by Customer_demographics
order by 'Total Number Of products'
```

| | Customer_demographics | Total Number Of products |
|---|---|---|
| 1 | Male | 21 |
| 2 | Non-binary | 23 |
| 3 | Female | 25 |
| 4 | Unknown | 31 |

**The Female is the most using of these products than Male, And the Unknown Customer is most than both.**

# Third Question: Products Across Locations

```sql
-----Products Accross Locations -----
select Location ,Product_type,count(Product_type) as 'Total Number Of products'
from supply_chain_data
group by rollup (Location,Product_type)
order by 'Total Number Of products'
```

| | Location | Product_type | Total Number Of products |
|---|---|---|---|
| 6 | Chennai | haircare | 6 |
| 7 | Bangalore | skincare | 6 |
| 8 | Delhi | cosmetics | 6 |
| 9 | Mumbai | haircare | 7 |
| 10 | Mumbai | skincare | 7 |
| 11 | Mumbai | cosmetics | 8 |
| 12 | Kolkata | haircare | 8 |
| 13 | Bangalore | haircare | 9 |
| 14 | Chennai | skincare | 9 |
| 15 | Kolkata | skincare | 13 |
| 16 | Delhi | NULL | 15 |
| 17 | Bangalore | NULL | 18 |
| 18 | Chennai | NULL | 20 |
| 19 | Mumbai | NULL | 22 |
| 20 | Kolkata | NULL | 25 |
| 21 | NULL | NULL | 100 |

The **Kolkata** is the most city of using products,

The **Delhi** is the least city of using products
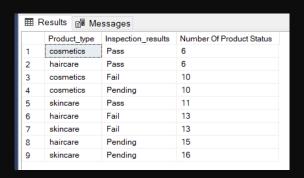
# Fourth Question: Status Of Products

```sql
----- Status Of Products -----
select Product_type,Inspection_results,count(Inspection_results) as 'Number Of Product Status'
from supply_chain_data
group by  Product_type,Inspection_results
order by 'Number Of Product Status'
```

| | Product_type | Inspection_results | Number Of Product Status |
|---|---|---|---|
| 1 | cosmetics | Pass | 6 |
| 2 | haircare | Pass | 6 |
| 3 | cosmetics | Fail | 10 |
| 4 | cosmetics | Pending | 10 |
| 5 | skincare | Pass | 11 |
| 6 | haircare | Fail | 13 |
| 7 | skincare | Fail | 13 |
| 8 | haircare | Pending | 15 |
| 9 | skincare | Pending | 16 |

The **skincare** is the most **Pending Product**, the **skincare** and **haircare** are the most **Fail** Products and **skincare** is the most **Pass** Products

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## Fifth Question: Total Cost Across Products

```
----- Total Cost Of Products -----
select Product_type,sum(Costs) as 'Total Cost Of Product'
from supply_chain_data
group by  Product_type
order by 'Total Cost Of Product'
```

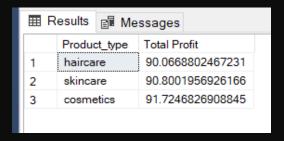| | Product_type | Total Cost Of Product |
|---|---|---|
| 1 | cosmetics | 13366.3972831576 |
| 2 | haircare | 17328.8628648875 |
| 3 | skincare | 22229.318067769 |

The **Skincare** is the highest in **Cost**, and **Cosmetics** is the least in **Cost**.

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## Sixth Question: Percentage Of Profit Across Products

```
----- Percentage Of Profit Across Products  -----
select Product_type,((sum(Revenue_generated)-sum(Costs))/sum(Revenue_generated))*100 as 'Total Profit'
from supply_chain_data
group by  Product_type
order by 'Total Profit'
```
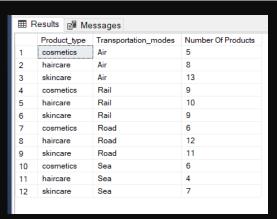
| | Product_type | Total Profit |
|---|---|---|
| 1 | haircare | 90.0668802467231 |
| 2 | skincare | 90.8001956926166 |
| 3 | cosmetics | 91.7246826908845 |

The **Cosmetics** is the most **Profitable Product**

# Seventh Question: Products Across Transportation Modes

```
----- Number Of Products Across Transportation Modes  -----
select Product_type, Transportation_modes,COUNT(*) as 'Number Of Products'
from supply_chain_data
group by  Product_type,Transportation_modes
```

| | Product_type | Transportation_modes | Number Of Products |
|---|---|---|---|
| 1 | cosmetics | Air | 5 |
| 2 | haircare | Air | 8 |
| 3 | skincare | Air | 13 |
| 4 | cosmetics | Rail | 9 |
| 5 | haircare | Rail | 10 |
| 6 | skincare | Rail | 9 |
| 7 | cosmetics | Road | 6 |
| 8 | haircare | Road | 12 |
| 9 | skincare | Road | 11 |
| 10 | cosmetics | Sea | 6 |
| 11 | haircare | Sea | 4 |
| 12 | skincare | Sea | 7 |

**Air Mode**: the **Skincare Product** is the most **transported**.

**Rail Mode**: the **Haircare Product** is the most **transported**.

**Road Mode**: the **Haircare Product** is the most **transported**.

**Sea Mode**: the **Skincare Product** is the most **transported**.

**The Cosmetics Product** is more **portable** during the **Rail**.

**The Haircare Product** is more **Road** during the **Rail**.

**The Skincare Product** is more **portable** during the **Air**.

## *Thanks........*