

SQL Query

Analysis

# INTRODUCTION

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Here is a list of some analytical questions which has been solved using SQL Queries that provide us with some meaningful insights for the revenue generation of Supply Chain Management



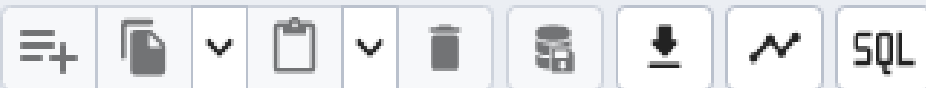
```
1  --1.Which Product Type generates the highest revenue?
2
3  ✓ SELECT "Product type", SUM("Revenue generated") AS total_revenue
4     FROM "Supply_Chain"
5     GROUP BY "Product type"
6     ORDER BY total_revenue DESC
7     LIMIT 1;
```


Data Output Messages Notifications

	     	   
	Product type  character varying	total_revenue  numeric
1	skincare	241628.1621330632273

```
1  --2.Are there any significant correlations between Lead times and Order quantities?
2
3  ✓ SELECT CORR("Lead times", "Order quantities") AS correlation
4  FROM "Supply_Chain";
```

Data Output Messages Notifications



	correlation double precision 
1	0.10545932302505705

```

1  --3.How do Shipping costs vary by Shipping carrier and Location?
2
3  ✓ SELECT
4      "Shipping carriers",
5      "Location",
6      AVG("Shipping costs") AS avg_shipping_cost,
7      MIN("Shipping costs") AS min_shipping_cost,
8      MAX("Shipping costs") AS max_shipping_cost,
9      COUNT(*) AS total_shipments
10 FROM "Supply_Chain"
11 GROUP BY "Shipping carriers", "Location"
12 ORDER BY "Shipping carriers", "Location";

```

Data Output Messages Notifications

	Shipping carriers character varying	Location character varying	avg_shipping_cost numeric	min_shipping_cost numeric	max_shipping_cost numeric	total_shipments bigint
1	Carrier A	Bangalore	6.6100933267703867	2.45793352798733	9.537283061108338	6
2	Carrier A	Chennai	6.1274204696850363	1.019487570822119	8.87833465092684	6
3	Carrier A	Delhi	5.0657734001254215	3.8905479158706715	6.247860914975991	5
4	Carrier A	Kolkata	3.9504322053945653	1.325274010184522	9.56764892092304	7
5	Carrier A	Mumbai	6.5327138472784982	3.8012531329310777	9.71657477143131	4
6	Carrier B	Bangalore	4.6543915848749741	1.1942518648849991	7.674430708112694	10
7	Carrier B	Chennai	3.5013351264921405	1.3110237561206226	6.037883769218298	8



8	Carrier B	Delhi	5.1271223160971031	1.0134865660958963	9.16055853538187	6
9	Carrier B	Kolkata	7.3432109039205793	2.0397701894493316	9.929816245277259	9
10	Carrier B	Mumbai	6.5491390771380710	1.4543053101535515	9.898140508069222	10
11	Carrier C	Bangalore	8.6337700080679385	7.526248326851508	9.741291689284369	2
12	Carrier C	Chennai	4.8343954443349234	2.473897761045461	8.249168704871728	6
13	Carrier C	Delhi	4.9891535371999174	2.5056210329009154	7.577449657376693	4
14	Carrier C	Kolkata	5.5881581427275649	1.7295685635434288	9.030340422521949	9
15	Carrier C	Mumbai	5.7319383520368139	1.7744297140717396	9.147811544710633	8

```

1  --4. Which suppliers have the most efficient manufacturing processes based on Manufacturing lead time and
2  --Production volumes?
3
4  ✓ SELECT "Supplier name", AVG("Manufacturing lead time") AS avg_lead_time, AVG("Production volumes")
5  AS avg_production_volume
6  FROM "Supply_Chain"
7  GROUP BY "Supplier name"
8  ORDER BY avg_lead_time ASC, avg_production_volume DESC
9  LIMIT 10;

```

Data Output Messages Notifications



	Supplier name character varying	avg_lead_time numeric	avg_production_volume numeric
1	Supplier 1	12.5925925925925926	501.666666666666667
2	Supplier 3	14.933333333333333	533.133333333333333
3	Supplier 4	15.333333333333333	653.111111111111111
4	Supplier 2	15.5909090909090909	641.13636363636364
5	Supplier 5	16.333333333333333	521.166666666666667

```
1  --5. What demographic group contributes the most to sales?
2
3  ✓ SELECT "Customer demographics", SUM("Revenue generated") AS total_revenue
4  FROM "Supply_Chain"
5  GROUP BY "Customer demographics"
6  ORDER BY total_revenue DESC
7  LIMIT 1;
8
```

Data Output Messages Notifications

         			
	Customer demographics character varying 	total_revenue numeric 	
1	Unknown	173090.1338369746713	