



# **FURNITURE SALES ANALYSIS USING SQL**

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## THE DATASET INCLUDES THE FOLLOWING COLUMNS:

- PRICE: THE SELLING PRICE OF THE PRODUCT.
- COST: THE COST INCURRED TO PRODUCE OR ACQUIRE THE PRODUCT.
- SALES: THE NUMBER OF UNITS SOLD.
- PROFIT\_MARGIN: THE PERCENTAGE PROFIT MADE ON THE PRODUCT, CALCULATED AS A MARGIN OVER COST.
- INVENTORY: THE CURRENT STOCK OF THE PRODUCT AVAILABLE FOR SALE.
- DISCOUNT\_PERCENTAGE: THE PERCENTAGE DISCOUNT APPLIED TO THE PRODUCT.
- DELIVERY\_DAYS: THE AVERAGE NUMBER OF DAYS TAKEN FOR THE PRODUCT TO BE DELIVERED.
- CATEGORY: THE CATEGORY OF PRODUCT
- MATERIAL: THE MATERIAL THE PRODUCT IS MADE OF.
- COLOR: THE COLOR OF THE PRODUCT.
- LOCATION: THE TYPE OF REGION WHERE THE PRODUCT IS SOLD.
- SEASON: THE SEASON DURING WHICH THE PRODUCT IS SOLD.
- STORE\_TYPE: THE TYPE OF STORE SELLING THE PRODUCT.
- BRAND: THE BRAND OF THE PRODUCT).
- REVENUE: THE TOTAL REVENUE GENERATED FROM THE PRODUCT SALES.

# Q1. Find the total revenue generated by each brand.

```
select brand, sum(revenue) as [total revenue]
from Furniture
group by brand;
```

	brand	total revenue
1	BrandB	3441197.78628621
2	BrandC	3966674.88566551
3	BrandA	3705618.14319872
4	BrandD	3703643.32759409

## Q2. Get the total sales and revenue by location and season.

```
select location, season, sum(sales) as [Total sales], sum(revenue) as [Total revenue]
from furniture
group by location , season
```

	location	season	Total sales	Total revenue
1	Urban	Summer	5106	1125719.29728194
2	Suburban	Summer	4201	1178902.99878103
3	Rural	Winter	5697	1286297.83013912
4	Rural	Fall	6151	1534122.7561895
5	Urban	Winter	5447	1038049.8817385
6	Urban	Fall	4663	1156843.72071975
7	Suburban	Winter	5269	1278086.68456797
8	Rural	Spring	5245	1323715.5329683
9	Urban	Spring	4701	1138487.29942436
10	Rural	Summer	5281	1167932.76003165
11	Suburban	Spring	5393	1360452.49931801
12	Suburban	Fall	5156	1228522.88158439

### Q3. Identify the product (category) that has the highest discount percentage.

```
select top 1 category ,max(discount_percentage) as [Highest discount percentage]
from Furniture
group by category
order by max(discount_percentage) desc
```

	category	Highest discount percentage
1	Desk	29.9912291346549

Q4. List all products (categories) where the sales are above the average sales.

```
select distinct category  
from Furniture  
where sales > (  
    select avg(sales)  
    from Furniture )
```

	category
1	Sofa
2	Chair
3	Desk
4	Table
5	Bed

## Q5. Calculate the average profit margin for each material type.

```
select material, avg(profit_margin) as [avg profit margin]
from Furniture
group by material
```

	material	avg profit margin
1	Glass	30.3174123019689
2	Fabric	29.2331718622987
3	Wood	30.5771402191613
4	Plastic	30.0918970750603
5	Metal	30.6779173782962

## Q6. Which category received the highest discount in the Winter season, and what were its sales?

```
select TOP 1 category,sales, max(discount_percentage) as[discount_percentage]
from Furniture
where season='winter'
group by category,sales
order by max(discount_percentage) desc
```

	category	sales	discount_percentage
1	Table	30	29.9848905125616

## Q.7 Does the number of delivery days affect the revenue generated for a product

```
select delivery_days, avg(revenue) as [average revenue]
from Furniture
group by delivery_days
order by avg(revenue) desc
```

	delivery_days	average revenue
1	6	6805.35392643325
2	9	6414.60224967938
3	8	5887.3783637333
4	7	5871.65547456674
5	3	5791.30907035331
6	1	5763.24916284796
7	4	5705.31255289099
8	2	5688.92801346612
9	5	5572.9904197949

## Q8. What is the average profit margin for category with inventory greater than 100 units?

```
select category, AVG(profit_margin) as [Avg profit margin]
from Furniture
where inventory > 100
group by category
order by AVG(profit_margin) desc
```

	category	Avg profit margin
1	Bed	31.1848760549815
2	Desk	30.7221639385231
3	Table	30.3956179746792
4	Sofa	30.1722809389478
5	Chair	29.5217498661647

	color	material	sales	profit
1	Green	Wood	2578	8305.21
2	White	Metal	2514	8431.22
3	Red	Wood	2394	7578.40
4	White	Plastic	2351	8080.60
5	Black	Glass	2335	7584.55
6	Blue	Metal	2315	6670.88
7	Brown	Fabric	2315	6909.21
8	Brown	Metal	2291	7282.76
9	Black	Metal	2258	7405.81
10	Black	Plastic	2249	7493.39
11	White	Glass	2242	8337.02
12	Black	Wood	2188	7747.65
13	Blue	Wood	2179	7684.99
14	Blue	Fabric	2096	6454.25
15	Blue	Plastic	2074	6963.11
16	Brown	Wood	2064	7607.62
17	Red	Glass	2050	6453.47
18	Red	Plastic	2003	6813.65
19	Green	Glass	1961	7351.47
20	Red	Fabric	1942	6702.37
21	Green	Plastic	1931	5177.16
22	White	Fabric	1910	6791.66
23	Red	Metal	1866	7602.55
24	Brown	Glass	1840	6079.56
25	Blue	Glass	1834	5360.62
26	Green	Metal	1813	6058.70
27	Black	Fabric	1811	6164.49
28	Brown	Plastic	1647	5392.90
29	Green	Fabric	1635	4866.30
30	White	Wood	1624	5061.20

## Q9. How do sales and profit vary for different combinations of color and material?

```
select color,material, sum(sales)as[sales],
cast(sum(price-cost) as decimal (10,2)) as[profit]
from Furniture
group by color,material
order by sum(sales) desc
```

## Q10. Which material types result in the most profitable products?

```
select material, sum(price-cost)as [profit]
from Furniture
group by material
order by sum(price-cost) desc
```

	material	profit
1	Wood	43985.0813545416
2	Metal	43451.9166343397
3	Glass	41166.6916582866
4	Plastic	39920.8190791212
5	Fabric	37888.2732434591

# Q11. Which product categories are best-sellers in different locations and seasons?

```
select category, location, season ,max(sales) as [total sales]
from Furniture
group by category,location,season
order by max(sales) desc, location,season
```

	category	location	season	total sales
1	Bed	Rural	Fall	49
2	Chair	Rural	Fall	49
3	Table	Rural	Fall	49
4	Table	Rural	Spring	49
5	Chair	Rural	Spring	49
6	Bed	Rural	Spring	49
7	Desk	Rural	Spring	49
8	Bed	Rural	Summer	49
9	Table	Rural	Summer	49
10	Sofa	Rural	Winter	49
11	Bed	Rural	Winter	49
12	Chair	Rural	Winter	49
13	Desk	Rural	Winter	49
14	Desk	Subur...	Fall	49
15	Chair	Subur...	Fall	49
16	Sofa	Subur...	Fall	49
17	Table	Subur...	Fall	49
18	Sofa	Subur...	Spring	49
19	Bed	Subur...	Spring	49
20	Chair	Subur...	Summer	49
21	Chair	Subur...	Winter	49
22	Desk	Subur...	Winter	49
23	Sofa	Subur...	Winter	49
24	Table	Subur...	Winter	49
25	Desk	Urban	Fall	49
26	Bed	Urban	Fall	49
27	Chair	Urban	Spring	49
28	Table	Urban	Spring	49
29	Table	Urban	Summer	49
30	Desk	Urban	Summer	49

Q12. What is the total revenue for BrandA during the Summer season in suburban areas?

```
select sum(revenue) as[total revenue]
from Furniture
where brand ='brandA'and season='summer'
and location='suburban'
```

	total revenue
1	384645.491864436