

HOME FURNITURE PVT. LTD



SALES

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ABOUT

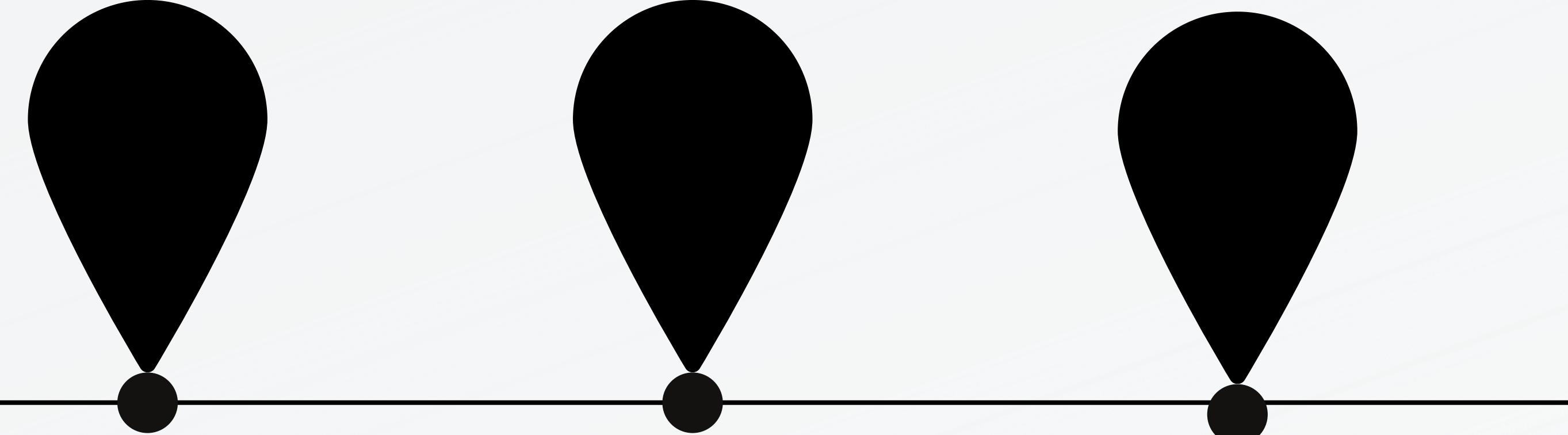


SQL (Structured Query Language) is a standardized programming language used for managing and manipulating relational databases



It is the primary language for interacting with RDBMS (**Relational Database Management Systems**), allowing users to perform various operations such as querying data, updating records, and managing database objects.

APPLICATION OF SQL

- 
- Businesses handling complex data, such as an online shoe store, would benefit from using SQL to organize and retrieve their data from different tables.
 - Knowledge of SQL is a common requirement for business analyst positions as it allows for effective data reporting, analysis and informed business decision making.
 - With big data and relational databases being the new norm for most companies, SQL knowledge is a prerequisite for almost any business analyst job.



RAW SALES DATA OF HOME FURNITURE PVT. LTD

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P |
|----|-----|------------|----------|----------|--------|----------|--------|------------|----------|-------|---------------|-----------|---------------------|---------------|----------|--------------|
| 1 | SNo | Brand | Category | Material | Colour | location | Season | Store_Type | Cost | Sales | Profit_Margin | Inventory | Discount_Percentage | Delivery_Days | Revenue | Transactions |
| 2 | 1 | Greenply | Bed | Plastic | Red | Rural | Spring | Online | 181.6109 | 40 | 16.8992 | 105 | 27.7964 | 9 | 3949.165 | Online |
| 3 | 2 | Home Town | Chair | Glass | Blue | Rural | Summer | Online | 385.0338 | 7 | 19.4189 | 192 | 26.9437 | 6 | -3521 | Cash |
| 4 | 3 | Home Town | Table | Metal | Black | Suburban | Fall | Online | 276.7368 | 32 | 27.0588 | 59 | 21.9481 | 2 | 14285.56 | Online |
| 5 | 4 | Home Town | Table | Glass | Green | Rural | Summer | Retail | 281.8413 | 48 | 11.7581 | 45 | 11.0099 | 2 | 12261.07 | Online |
| 6 | 5 | Home Town | Chair | Glass | Brown | Rural | Fall | Online | 69.74368 | 19 | 41.981 | 35 | 3.1838 | 9 | -4588.26 | Cash |
| 7 | 6 | Centuryply | Table | Plastic | Brown | Urban | Fall | Retail | 65.35208 | 6 | 45.6294 | 185 | 20.6594 | 8 | 9136.302 | Cash |
| 8 | 7 | Greenply | Sofa | Glass | Green | Suburban | Summer | Online | 64.07627 | 20 | 15.8415 | 165 | 29.3596 | 9 | 4128.413 | Online |
| 9 | 8 | Oxford | Sofa | Wood | White | Urban | Winter | Retail | 297.1412 | 27 | 32.434 | 10 | 21.7981 | 4 | 9516.966 | Online |
| 10 | 9 | Home Town | Bed | Fabric | Brown | Suburban | Spring | Retail | 268.8329 | 43 | 16.1212 | 11 | 27.8619 | 4 | 8882.539 | Online |
| 11 | 10 | Home Town | Sofa | Fabric | Black | Urban | Spring | Retail | 316.0052 | 37 | 14.2764 | 169 | 24.1291 | 2 | 8946.638 | Cash |
| 12 | 11 | Centuryply | Sofa | Plastic | Green | Urban | Spring | Online | 31.11208 | 48 | 47.5017 | 38 | 4.8934 | 1 | 1201.732 | Online |
| 13 | 12 | Centuryply | Desk | Fabric | White | Rural | Fall | Retail | 415.1376 | 7 | 14.6614 | 198 | 7.4761 | 4 | 1782.771 | Online |
| 14 | 13 | Centuryply | Desk | Wood | Blue | Rural | Fall | Retail | 288.442 | 5 | 32.0672 | 138 | 10.256 | 8 | -1043.26 | Cash |
| 15 | 14 | Greenply | Desk | Plastic | Blue | Suburban | Summer | Online | 102.4942 | 11 | 29.5827 | 35 | 5.0478 | 2 | 1003.51 | Cash |
| 16 | 15 | Oxford | Desk | Metal | Black | Suburban | Winter | Retail | 98.9499 | 15 | 24.9363 | 51 | 17.4495 | 8 | -1415.11 | Online |
| 17 | 16 | Greenply | Table | Fabric | Black | Suburban | Summer | Retail | 115.3762 | 3 | 12.9447 | 30 | 29.2635 | 1 | 1398.517 | Online |
| 18 | 17 | Home Town | Bed | Glass | Black | Rural | Summer | Online | 94.88369 | 5 | 49.2354 | 32 | 22.8438 | 1 | 603.6744 | Online |
| 19 | 18 | Centuryply | Bed | Wood | Brown | Urban | Winter | Retail | 197.6479 | 23 | 30.9263 | 140 | 12.7016 | 4 | 2242.935 | Cash |
| 20 | 19 | Home Town | Sofa | Wood | Black | Suburban | Fall | Online | 189.4125 | 37 | 22.4911 | 145 | 0.1351 | 7 | 8595.562 | Online |
| 21 | 20 | Oxford | Bed | Fabric | Green | Rural | Summer | Online | 142.8659 | 9 | 21.0917 | 168 | 9.3983 | 9 | 4191.031 | Online |
| 22 | 21 | Oxford | Sofa | Metal | Green | Rural | Summer | Online | 252.7886 | 15 | 22.2987 | 57 | 15.8028 | 5 | -7173.24 | Cash |
| 23 | 22 | Greenply | Bed | Glass | White | Urban | Fall | Retail | 62.45034 | 3 | 44.6226 | 183 | 9.7275 | 2 | 3196.398 | Cash |
| 24 | 23 | Greenply | Chair | Metal | Green | Urban | Spring | Online | 112.4645 | 29 | 38.0242 | 151 | 3.331 | 7 | -1044.71 | Online |
| 25 | 24 | Centuryply | Chair | Metal | Brown | Rural | Winter | Retail | 138.2613 | 6 | 35.6514 | 127 | 13.2829 | 2 | -1176.48 | Online |
| 26 | 25 | Centuryply | Bed | Fabric | Blue | Urban | Winter | Retail | 209.7428 | 17 | 17.8225 | 30 | 7.5976 | 9 | -10139.1 | Online |
| 27 | 26 | Home Town | Table | Glass | White | Urban | Spring | Retail | 246.6374 | 26 | 38.8496 | 54 | 27.277 | 9 | 10454.45 | Cash |

CREATING DATABASE

Here we have created a database named as Home furniture pvt. ltd. to analyse the different scenarios of the sales of **Home Furniture Pvt. Ltd.**

-- To Create the Database Home Furniture Pvt Ltd.
CREATE DATABASE Homefurniturepvtltd;

IMPORTING EXTERNAL DATA

```
1 -- To Create the Database Home Furniture Pvt Ltd.  
2· CREATE DATABASE Homefurniturepvtltd;  
3  
4 -- To use the Database  
5· use Homefurniturepvtltd;  
6  
7 -- To view the Structure of the Kaggle Dataset  
8· desc dataset;  
9
```

| Field | Type | Null | Key | Default | Extra |
|------------|------|------|-----|---------|-------|
| SNo | int | NO | PRI | NULL | |
| Brand | text | YES | | NULL | |
| Category | text | YES | | NULL | |
| Material | text | YES | | NULL | |
| Colour | text | YES | | NULL | |
| location | text | YES | | NULL | |
| Season | text | YES | | NULL | |
| Store_Type | text | YES | | NULL | |

- After creating and using the database, the next step is to table data import wizard .
- Thereafter to view the the structure of imported table, use **desc** command to view the structure.



ADDING PRIMARY KEY

```
1 -- To Create the Database Home Furniture Pvt Ltd.  
2 • CREATE DATABASE Homefurniturepvtltd;  
3  
4 -- To use the Database  
5 • use Homefurniturepvtltd;  
6  
7 -- To view the Structure of the Kaggle Dataset  
8 • desc dataset;  
9
```

| Field | Type | Null | Key | Default | Extra |
|------------|------|------|-----|---------|-------|
| SNo | int | NO | PRI | NULL | |
| Brand | text | YES | | NULL | |
| Category | text | YES | | NULL | |
| Material | text | YES | | NULL | |
| Colour | text | YES | | NULL | |
| location | text | YES | | NULL | |
| Season | text | YES | | NULL | |
| Store_Type | text | YES | | NULL | |

- Here we added Serial No.(SNo) as a **PRIMARY KEY**



1.) ANALYZING TOTAL COST IN EACH CATEGORY

```
20 -- Q.1 What is the Total Cost in each Category?  
21 • SELECT Category, SUM(Cost) AS Total_Cost  
22 FROM dataset  
23 GROUP BY Category;  
24
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

| Category | Total_Cost |
|----------|-------------------|
| Bed | 87773.36892186005 |
| Chair | 95490.40453536 |
| Table | 104104.94975273 |
| Sofa | 94449.88725227004 |
| Desk | 98006.65624311005 |

- Here we have analysed total cost of each category of products.
- As it can be seen in the Result Grid, Table category is the most costlier and Bed category is the least costlier



2.) ANALYZING TOTAL SALES AND REVENUE IN EACH CATEGORY

```
25 -- Q.2 What is the Total Sales and Revenue in each Category?  
26 • SELECT Category, SUM(Sales) AS Total_Sales, SUM(Revenue) AS Total_Revenue  
27 FROM dataset  
28 GROUP BY Category;  
29
```

| Result Grid | | |
|-------------|-------------|--------------------|
| Category | Total_Sales | Total_Revenue |
| Bed | 11968 | 2780468.2319999994 |
| Chair | 12286 | 2912969.7820999976 |
| Table | 13320 | 3366945.4552999996 |
| Sofa | 12585 | 2974948.6888999967 |
| Desk | 12151 | 2781801.9873000006 |

- Here we have analysed total Sales and Revenue of each category of products.
- As it can be seen in the Result Grid, Bed has highest revenue and Desk has least revenue

3.) ANALYZING TOTAL PROFIT IN EACH CATEGORY

```
30      -- Q.3 What is the Total Profit in each Category?  
31 •  SELECT Category, SUM(Profit_Margin) AS Total_Profit  
32      FROM dataset  
33      GROUP BY Category;  
34
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|----------|--------------------|---------|--------------------|
| | Category | Total_Profit | | |
| ▶ | Bed | 14829.716000000017 | | |
| ▶ | Chair | 14988.341300000004 | | |
| ▶ | Table | 15918.896899999998 | | |
| ▶ | Sofa | 14670.134600000005 | | |
| ▶ | Desk | 15114.340299999998 | | |

- Here we have analysed total Profit of each category of products.
- As it can be seen in the Result Grid, Table category gathers maximum profit and Desk has gathers least profit

4.) ANALYZING TOTAL SALES, REVENUE AND PROFIT IN DIFFERENT STORES

```
35 -- Q.4 What is the Total Sales, Revenue and Profit in different store types?
36 • SELECT Store_Type, SUM(Sales) AS Total_Sales, SUM(Revenue) AS Total_Revenue, SUM(Profit_Margin) AS Total_Profit
37 FROM dataset
38 GROUP BY Store_Type;
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

| Store_Type | Total_Sales | Total_Revenue | Total_Profit |
|------------|-------------|-------------------|-------------------|
| Online | 32587 | 7599242.449699998 | 39617.47199999989 |
| Retail | 29723 | 7217891.695900004 | 35903.95710000004 |

- Here we have analysed total Sales, Revenue and Profit in different stores types.
- As it can be seen in the Result Grid, Online makes maximum revenue as Retail Type

5.) ANALYZING TOTAL SALES, REVENUE AND PROFIT IN DIFFERENT LOCATIONS

```
40 -- Q.5 What is the Total Sales, Revenue and Profit in different Locations?  
41 • SELECT location, SUM(Sales) AS Total_Sales, SUM(Revenue) AS Total_Revenue, SUM(Profit_Margin) AS Total_Profit  
42 FROM dataset  
43 GROUP BY location;  
44
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

| location | Total_Sales | Total_Revenue | Total_Profit |
|----------|-------------|-------------------|--------------------|
| Rural | 22374 | 5312068.879999999 | 26877.91569999972 |
| Suburban | 20019 | 5045965.066100001 | 24765.688600000012 |
| Urban | 19917 | 4459100.199499997 | 23877.824800000002 |

- Here we have analysed total Sales and Revenue of each category of products, in different locations.
- As it can be seen in the Result Grid, Rural has highest profit and Urban has least profit

6.) ANALYZING TOTAL DELIVERY DAYS IN EACH CATEGORY

```
45    -- Q.6 What is Total delivery days in each Category?  
46 •  SELECT Category, SUM(Delivery_Days) AS Total_Delivery_Days  
47     FROM dataset  
48     GROUP BY Category;  
49
```

Result Grid | Filter Rows: _____ | Export: | Wrap Cell Content:

| Category | Total_Delivery_Days |
|----------|---------------------|
| Bed | 2330 |
| Chair | 2405 |
| Table | 2641 |
| Sofa | 2378 |
| Desk | 2481 |

- Here we have analysed total Delivery Days in each category
- As it can be seen in the Result Grid, Bed Category takes Most Delivery Days and Desk takes least Delivery Days



7.) ANALYZING TOTAL LEFT OUT STOCK IN EACH CATEGORY

```
50    -- Q.7 What is Total Left out Stock in each Category?  
51 •  SELECT Category, SUM(Inventory - Sales) AS Left_Out_Stock  
52   FROM Dataset  
53   GROUP BY Category;  
54
```

| Result Grid | |
|-------------|----------------|
| Category | Left_Out_Stock |
| Bed | 35005 |
| Chair | 34715 |
| Table | 38487 |
| Sofa | 37233 |
| Desk | 36539 |

- Here we have analysed total left out Stock in each category.
- As it can be seen in the Result Grid, Bed has least left out stock and Desk has maximum.



8.) ANALYZING AVERAGE PROFIT MARGIN IN EACH CATEGORY

```
55      -- Q.8) What is the average profit margin in each Category?  
56 •     SELECT Category, (AVG(Profit_Margin)) AS Profit_Margin  
57         FROM Dataset  
58         Group BY Category;  
59
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|--------------------|--------------|---------|--------------------|
| Category | Profit_Margin | | | |
| Bed | 30.83101039501043 | | | |
| Chair | 30.157628370221335 | | | |
| Table | 29.866598311444648 | | | |
| Sofa | 30.061751229508207 | | | |
| Desk | 30.168343912175608 | | | |

- Here we have analysed average profit margin in each category.
- As it can be seen in the Result Grid, Bed has highest profit margin and Desk has least profit margin.



9.) ANALYZING AVERAGE PROFIT MARGIN IN EACH BRAND

```
60      -- Q.9) What is the average profit margin in each Brand?  
61 •      SELECT Brand, (AVG(Profit_Margin)) AS Profit_Margin  
62          FROM Dataset  
63          Group BY Brand;  
64
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|--------------------|--------------|---------|--------------------|
| Brand | Profit_Margin | | | |
| Greenply | 30.388991538461536 | | | |
| Home Town | 30.430387702265392 | | | |
| Centuryply | 30.383503061224484 | | | |
| Oxford | 29.6538900621118 | | | |

- Here we have analysed average profit margin inn each brand.
- As it can be seen in the Result Grid, Greenply has highest profit margin and Oxford has least profit margin.



10.) ANALYZING MAXIMUM PROFIT AMONG THE GIVEN BRANDS

```
65      -- Q.10) What is the maximum profit among the given Brands?  
66 •   SELECT Brand, MAX(Profit_Margin) AS Max_Margin  
67     FROM Dataset  
68     Group BY Brand;  
69
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|------------|--------------|---------|--------------------|
| | Brand | Max_Margin | | |
| ▶ | Greenply | 49.9946 | | |
| | Home Town | 49.9995 | | |
| | Centuryply | 49.9761 | | |
| | Oxford | 49.9459 | | |

- Here we have analysed maximum profit among the given brands.
- As it can be seen in the Result Grid, Greenply has Maximum Profit.



11.) ANALYZING THE MINIMUM PROFIT AMONG THE GIVEN BRANDS

```
70      -- Q.11) What is the minimum profit among the given Brands?  
71 •      SELECT Brand, ROUND(MIN(Profit_Margin)) AS Min_Profit  
72          FROM Dataset  
73          Group BY Brand;  
74
```

Result Grid | Filter Rows: Export: Wrap Cell Content:

| Brand | Min_Profit |
|------------|------------|
| Greenply | 10 |
| Home Town | 10 |
| Centuryply | 10 |
| Oxford | 10 |

- Here we have analysed the minimum profit among profit among the given brands.
- As it can be seen in the Result Grid, Oxford has Minimum Profit



12.) ANALYZING PRODUCTS ARE SOLD WITH THE HIGHEST DISCOUNT PERCENTAGE

```
75    -- Q.12) Which products are sold with the highest discount percentages?  
76 •  SELECT Brand, Category,  
77      MAX(Discount_Percentage) AS Max_Discount  
78  FROM Dataset  
79  GROUP BY Brand, Category  
80  ORDER BY Max_Discount DESC;  
81
```

| Result Grid | | | |
|-------------|------------|----------|--------------|
| | Brand | Category | Max_Discount |
| ▶ | Greenply | Desk | 29.9912 |
| | Home Town | Table | 29.9849 |
| | Oxford | Table | 29.9809 |
| | Greenply | Table | 29.9795 |
| | Oxford | Desk | 29.967 |
| | Greenply | Sofa | 29.9579 |
| | Greenply | Bed | 29.9151 |
| | Oxford | Bed | 29.914 |
| | Oxford | Sofa | 29.9002 |
| | Centuryply | Table | 29.8827 |
| | Home Town | Chair | 29.8368 |
| | Greenply | Chair | 29.8259 |

- Here we have analysed the products are sold with the highest discount percentage.
- As it can be seen in the Result Grid, Greenply gives maximum discount



13.) ANALYZING AVERAGE INVENTORY LEVEL IN DIFFERENT LOCATIONS

```
82  -- Q.13) What is the average inventory level in different locations?  
83 • SELECT location,  
84   AVG(Inventory) AS  
85   Avg_Inventory  
86   FROM Dataset  
87   GROUP BY Location;
```

| Result Grid | |
|-------------|---------------|
| location | Avg_Inventory |
| Rural | 100.8328 |
| Suburban | 98.4477 |
| Urban | 93.4228 |

- Here we have analysed average inventory level in different locations
- As it can be seen in the Result Grid, that maximum inventory is kept in rural location.



14.) ANALYZING PROFIT MARGIN ON THE BASIS OF SEASONS

```
89 -- Q.14) Which Season yields the highest profit margins?  
90 • SELECT Season,  
91 AVG(Profit_Margin) AS  
92 Avg_Profit_Margin  
93 FROM Dataset  
94 GROUP BY Season  
95 ORDER By Avg_Profit_Margin  
96 DESC;
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|--------------------|--------------|---------|--------------------|
| Season | Avg_Profit_Margin | | | |
| Summer | 30.66078989726027 | | | |
| Winter | 30.30701536098308 | | | |
| Fall | 30.073037634408664 | | | |
| Spring | 29.81777410423456 | | | |

- Here we have analysed total profit margin on the basis of seasons.
- As it can be seen in the Result Grid, that the organisation recorded maximum profit in summer season.



15.) ANALYZING REVENUE ON THE BASIS OF PAYMENT METHODS

```
98 -- Q.15) How much revenue is generated by each payment method?  
99 • SELECT Transactions,  
100 SUM(Revenue) AS Total_Revenue  
101 FROM Dataset  
102 GROUP BY Transactions  
103 ORDER BY Total_Revenue DESC;
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|--------------|-------------------|--------------|---------|--------------------|
| Transactions | Total_Revenue | | | |
| Online | 6504832.649199998 | | | |
| Cash | 6040683.965500004 | | | |
| Online | 2271617.530899999 | | | |

- Here we have analysed total Revenue on the basis of payment methods.
- As it can be seen in the Result Grid, that the maximum revenue recorded by the organisation is when customer pay through online payment method.



16.) ANALYZING PRODUCTS WITH HIGH INVENTORY BUT LOW SALES

```
105 -- Q.16) Which Product have high inventory but low sales?  
106 • SELECT Brand, Category, Sales, Inventory  
107   FROM Dataset  
108   WHERE Sales <20 AND Inventory >100  
109   ORDER BY Inventory DESC;
```

| Result Grid | | | | |
|-------------|-----------|----------|-------|-----------|
| | Brand | Category | Sales | Inventory |
| ▶ | Home Town | Chair | 14 | 199 |
| | Greenply | Bed | 11 | 199 |
| | Home Town | Bed | 14 | 199 |
| | Oxford | Sofa | 3 | 199 |
| | Home Town | Bed | 18 | 199 |
| | Oxford | Sofa | 12 | 199 |
| | Greenply | Desk | 7 | 199 |
| | Greenply | Table | 6 | 199 |

- Here we have analysed products with high inventory but low sales.
- As it can be seen in the Result Grid, Oxford brand of sofa category has the least sales.

17.) ANALYZING PRODUCTS WITH FEWER DELIVERY DAYS WHICH TEND TO HAVE HIGHER SALES

```
111 -- Q.17) Do products with fewer delivery days tend to have higher sales?  
112 • SELECT Delivery_Days,  
113     AVG(Sales) AS Avg_Sales  
114     FROM Dataset  
115     GROUP BY Delivery_Days  
116     ORDER BY Delivery_Days;
```

| Result Grid | | Filter Rows: | Export: | Wrap Cell Content: |
|-------------|---------------|--------------|---------|--------------------|
| | Delivery_Days | Avg_Sales | | |
| ▶ | 1 | 24.8532 | | |
| | 2 | 24.5603 | | |
| | 3 | 25.0671 | | |
| | 4 | 25.5597 | | |
| | 5 | 22.8980 | | |
| | 6 | 25.0192 | | |
| | 7 | 24.8746 | | |
| | 8 | 26.2704 | | |

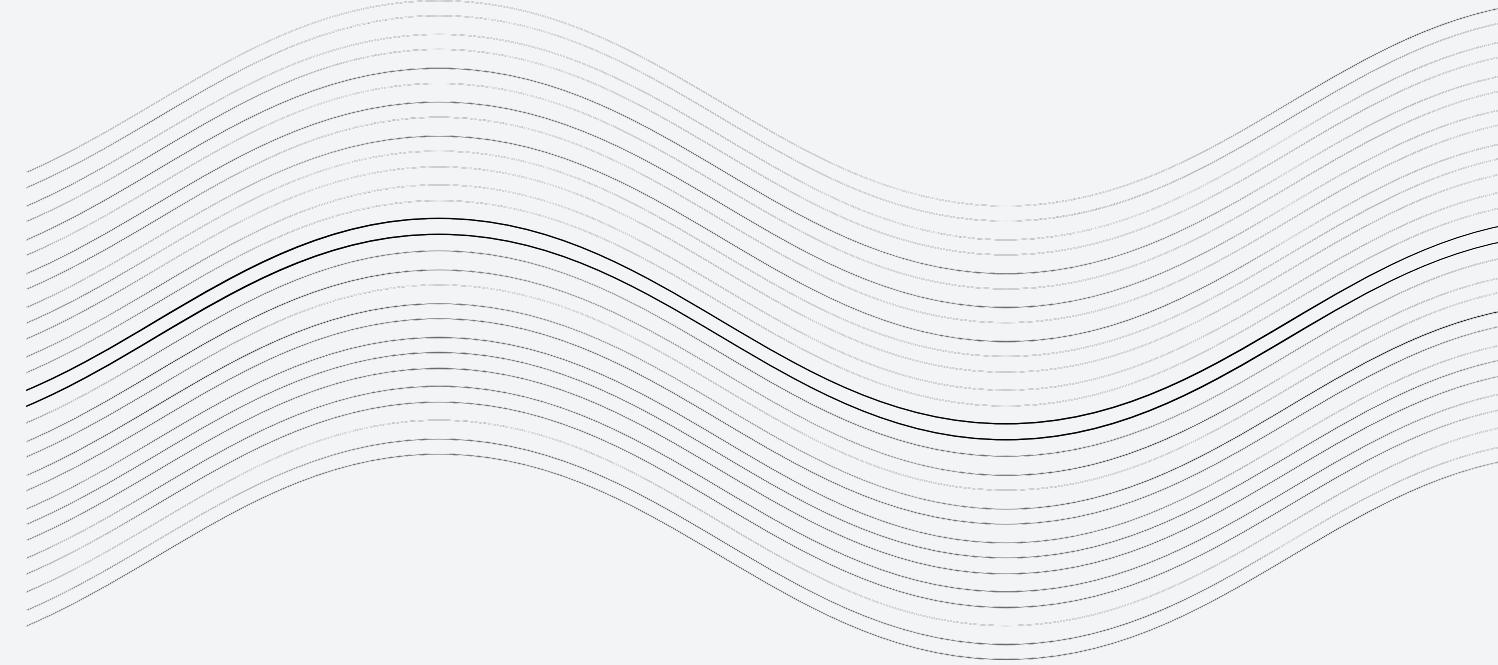
- Here we have analysed the products with fewer delivery days which tend to have higher sales.
- As it can be seen in the Result Grid, that as delivery days increases average sales also increases

KEY INSIGHTS



- ONLINE SALES ARE MORE THAN OFFLINE SALES
- AVERAGE PROFIT IS MORE IN SUMMER AS COMPARED TO WINTERS
- INVENTORY IS MORE IN RURAL AREAS AS COMPARED TO URBAN AREA
- DESK IS LEAST SOLD, THEREBY THEIR IS INCREASE IN QUANTITY OF UNSOLD DESKS

RECOMMENDATIONS



- Must focus on **Oxford Brand Sofa Sales** So that they not loose their Client.
- As **Home Furniture Pvt. Ltd** has recorded highest sales in Table category so, to increase the sales of other products organisation can give its other products as complementary so that buyer can have the experience of other products as well due to which he/she can recommend those product to another persons and the organisation can sell those products to those persons if they visit the stores.

THANK'S
FOR BEING
SUCH A
GREAT
AUDIENCE

