

My-SQL Information From Sales analytics in e-commerce

Description: This dataset contains sales data from an e-commerce platform.

Analysis Needs:

- Descriptive analysis to understand the distribution of sales data.
- Analyze sales performance by product category and time.
- Identify customer buying patterns
- Recommendations to increase sales.

Table Information :

	Field	Type	Null	Key	Default	Extra
►	InvoiceNo	varchar(20)	NO		NULL	
	StockCode	varchar(20)	NO		NULL	
	Description	varchar(40)	NO		NULL	
	Quantity	mediumint	NO		NULL	
	InvoiceDate2	tinytext	NO		NULL	
	UnitPrice	decimal(20,6)	NO		NULL	
	CustomerID	varchar(10)	YES		NULL	
	Country	varchar(20)	NO		NULL	

For Analysis in MySQL:

1. Descriptive analysis to understand the distribution of sales data.

In this description analysis, we want to know the distribution of data in terms of customer segmentation.

Syntax SQL:

```
select country,count(distinct customerid) as Total_Customers
from data_ecommerce1
group by country
order by Total_Customers desc;
```

Output :

	country	Total_Customers
▶	United Kingdom	3921
	Germany	94
	France	88
	Spain	30
	Belgium	25
	Switzerland	22
	Portugal	20
	Italy	14
	Finland	12
	Austria	11
	Norway	10
	Netherlands	9
	Australia	9
	Denmark	9

Result 23 ×

- Number of products sold by country

Syntax SQL:

```
select country, count(distinct description) as Total_Product_Sold
from data_ecommerce1
group by country
order by Total_Product_Sold desc;
```

Output:

	country	Total_Product_Sold
▶	United Kingdom	4007
	EIRE	2017
	Germany	1696
	France	1564
	Spain	1105
	Switzerland	987
	Netherlands	802
	Belgium	784
	Portugal	714
	Australia	608
	Norway	595
	Cyprus	498
	Italy	476
	Finland	465
	Channel Islands	436
	Unspecified	344
	Austria	306
	Sweden	261
	Israel	255
	Denmark	252
	Japan	216

Result 25 ×

- **Best Selling product**

Syntax SQL:

```
select country,description,count(description) as Total_Product_Sold
from data_ecommerce1
group by country,description
order by Total_Product_Sold desc;
```

Output:

	country	description	Total_Product_Sold
▶	United Kingdom	WHITE HANGING HEART T-LIGHT HOLDER	2216
	United Kingdom	JUMBO BAG RED RETROSPOT	1954
	United Kingdom	REGENCY CAKESTAND 3 TIER	1701
	United Kingdom	PARTY BUNTING	1607
	United Kingdom	LUNCH BAG RED RETROSPOT	1409
	United Kingdom	ASSORTED COLOUR BIRD ORNAMENT	1392
	United Kingdom	SET OF 3 CAKE TINS PANTRY DESIGN	1248
	United Kingdom	LUNCH BAG BLACK SKULL	1244
	United Kingdom	NATURAL SLATE HEART CHALKBOARD	1225
	United Kingdom	HEART OF WICKER SMALL	1182
	United Kingdom	JUMBO BAG PINK POLKADOT	1173
	United Kingdom	PACK OF 72 RETROSPOT CAKE CASES	1160
	United Kingdom	PAPER CHAIN KIT 50'S CHRISTMAS	1148
	United Kingdom	JUMBO STORAGE BAG SUKI	1140
	United Kingdom	JUMBO SHOPPER VINTAGE RED PAISLEY	1138
	United Kingdom	WOODEN PICTURE FRAME WHITE FINISH	1082
	United Kingdom	LUNCH BAG CARS BLUE	1077
	United Kingdom	SPOTTY BUNTING	1054
	United Kingdom	LUNCH BAG SPACEBOY DESIGN	1044

Result 34 x

- **Sold Products**

Syntax SQL:

```
select "All Products" as Description,
sum(quantity) as Total_Sold
from data_ecommerce1;
```

Output:

	Description	Total_Sold
▶	All Products	5572422

2. Analyze sales performance by product category and time.

Syntax SQL:

```
select description, date_format(invoicedate, '%y-%m') as Month,  
       sum(coalesce(quantity,0)) as Total_Sold  
from data_ecommerce1  
group by description, date_format(invoicedate, '%y-%m')  
order by Total_Sold desc;
```

Output:

Periode 2010-2011

	description	Month	Total_Sold
▶	PAPER CRAFT , LITTLE BIRDIE	NULL	80995
	MEDIUM CERAMIC TOP STORAGE JAR	NULL	78033
	WORLD WAR 2 GLIDERS ASSTD DESIGNS	NULL	54951
	JUMBO BAG RED RETROSPOT	NULL	48371
	WHITE HANGING HEART T-LIGHT HOLDER	NULL	37872
	POPCORN HOLDER	NULL	36749
	PACK OF 72 RETROSPOT CAKE CASES	NULL	36396
	ASSORTED COLOUR BIRD ORNAMENT	NULL	36362
	RABBIT NIGHT LIGHT	NULL	30739
	MINI PAINT SET VINTAGE	NULL	26633
	PACK OF 12 LONDON TISSUES	NULL	26119
	PACK OF 60 PINK PAISLEY CAKE CASES	NULL	24820
	VICTORIAN GLASS HANGING T-LIGHT	NULL	24275
	ASSORTED COLOURS SILK FAN	NULL	23826
	BROCADE RING PURSE	NULL	23020
	RED HARMONICA IN BOX	NULL	21903
	JUMBO BAG PINK POLKADOT	NULL	21448
	SMALL POPCORN HOLDER	NULL	20149
	PAPER CHAIN KIT 50'S CHRISTMAS	NULL	19329
	LUNCH BAG RED RETROSPOT	NULL	19232
	PARTY BUNTING	NULL	18283

Result 57 x