

SQL Data Analysis Report - Ecommerce Dataset

1. Objective

The objective of this task is to perform basic SQL data analysis using the Ecommerce dataset. The dataset was imported into SQLite Online and explored using various SQL commands to understand its structure and extract insights.

2. Dataset Overview

Dataset Name: Ecommerce.csv

Number of Records: 8

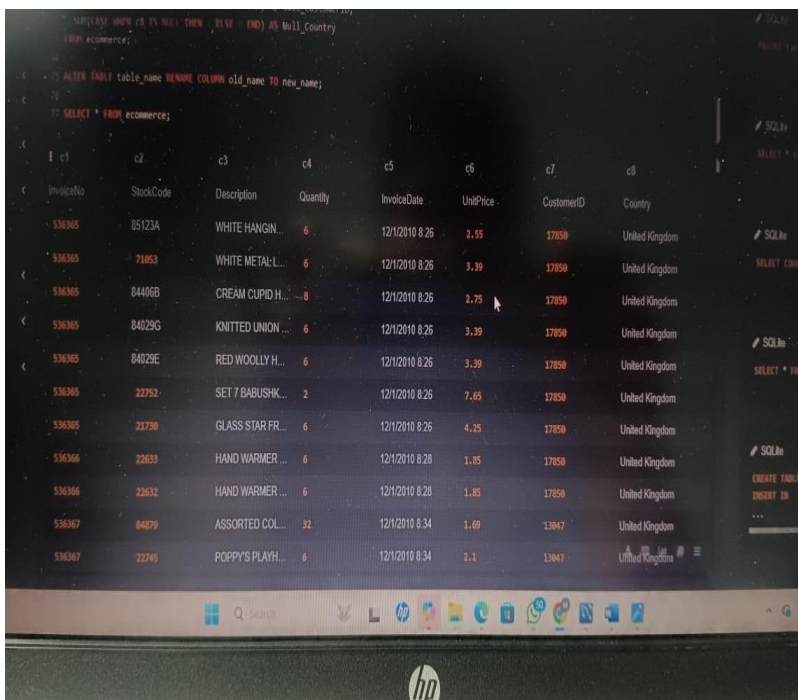
Number of Columns: 8

Columns include: InvoiceNo, StockCode, Description, Quantity, InvoiceDate, UnitPrice, CustomerID, and Country.

3. SQL Queries Executed

- Display all records

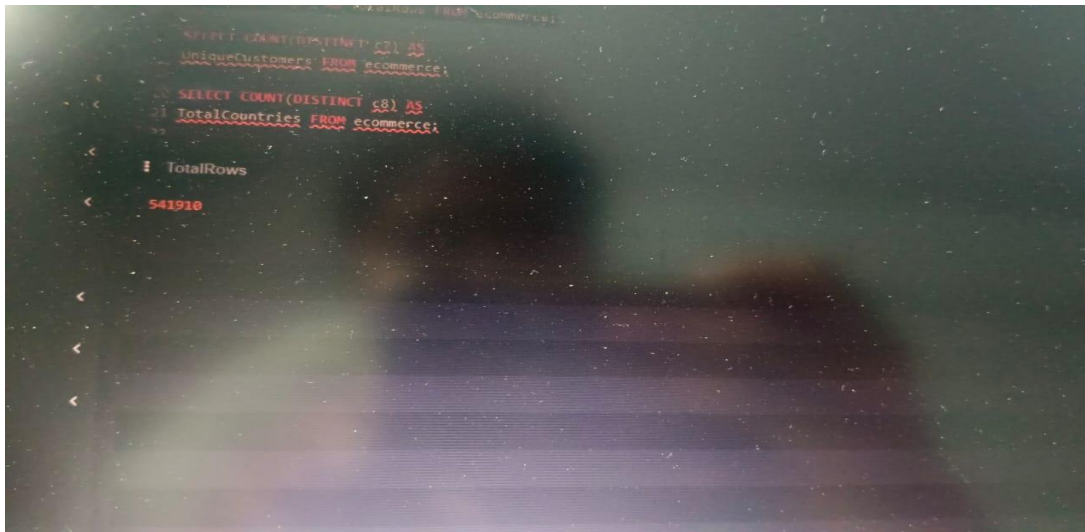
```
SELECT * FROM ecommerce;
```



InvoiceNo	StockCode	Description	Quantity	InvoiceDate	UnitPrice	CustomerID	Country
536365	05123A	WHITE HANGIN...	6	12/12/2010 8:26	2.55	17850	United Kingdom
536365	71863	WHITE METAL L...	6	12/12/2010 8:26	3.39	17850	United Kingdom
536365	84406B	CREAM CUPID H...	8	12/12/2010 8:26	2.75	17850	United Kingdom
536365	84029G	KNITTED UNION	6	12/12/2010 8:26	3.39	17850	United Kingdom
536365	84029E	RED WOOLLY H...	6	12/12/2010 8:26	3.39	17850	United Kingdom
536365	22952	SET 7 BABUSHK...	2	12/12/2010 8:26	7.65	17850	United Kingdom
536365	21730	GLASS STAR FR...	6	12/12/2010 8:26	4.25	17850	United Kingdom
536366	22633	HAND WARMER ...	6	12/12/2010 8:28	1.85	17850	United Kingdom
536366	22632	HAND WARMER ...	6	12/12/2010 8:28	1.85	17850	United Kingdom
536367	84879	ASSORTED COL...	32	12/12/2010 8:34	1.69	13047	United Kingdom
536367	22345	POPPY'S PLAYH...	6	12/12/2010 8:34	2.1	13047	United Kingdom

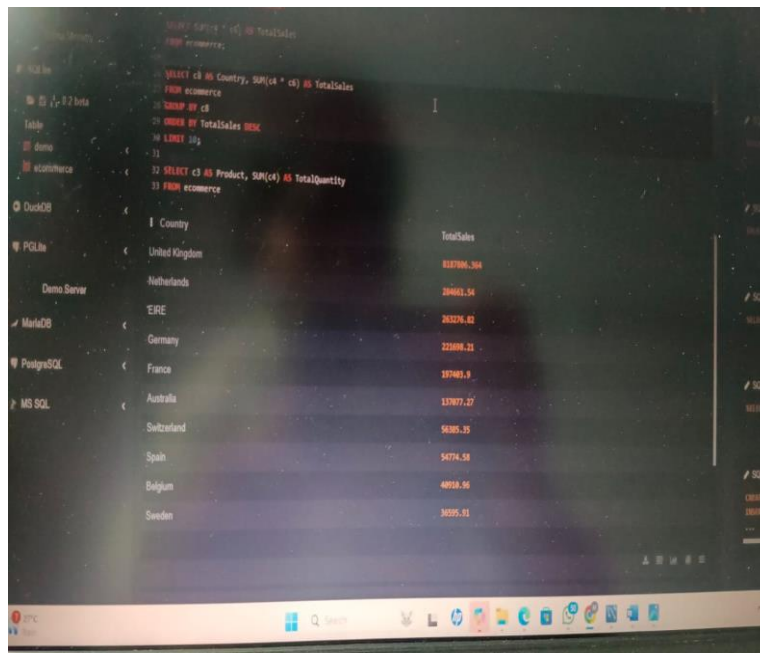
- Count total records:

```
SELECT COUNT(*) AS total_rows FROM ecomm
```



- Display distinct countries

```
SELECT DISTINCT Country FROM ecommerce;
```

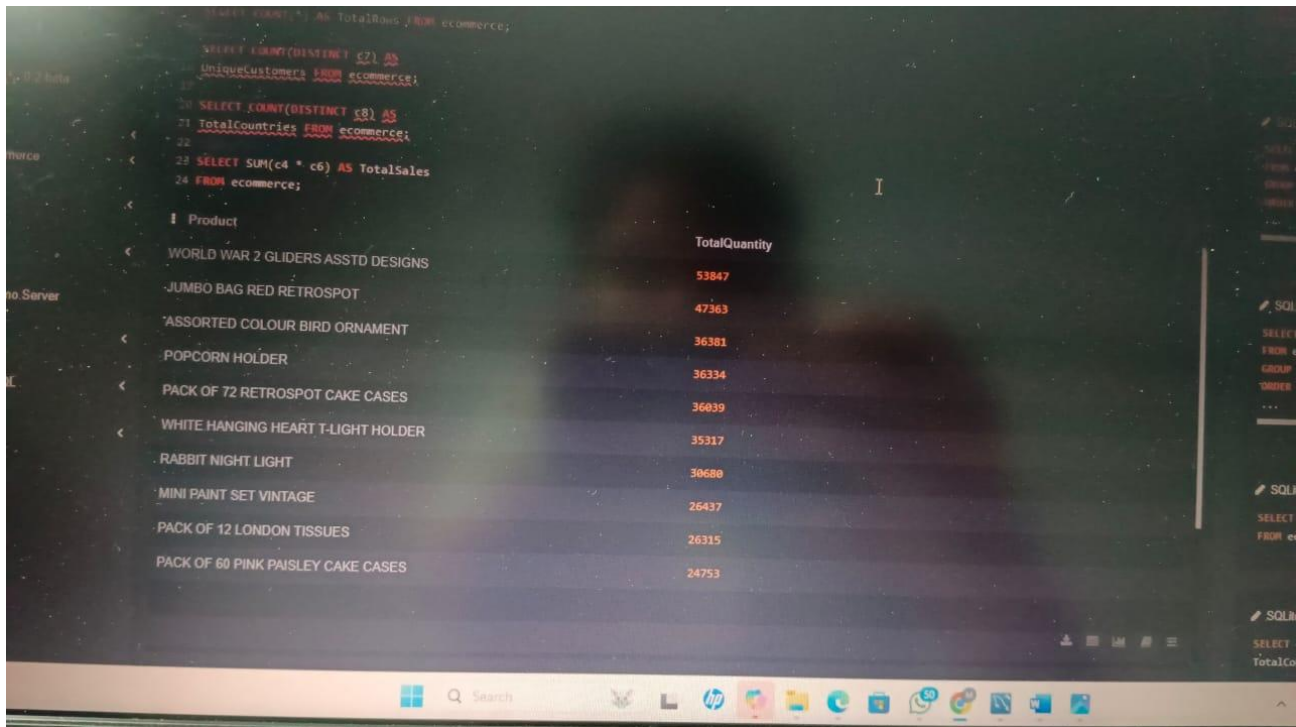


- Find total quantity per country

```
SELECT Country, SUM(Quantity) AS Total_Quantity FROM ecommerce GROUP BY Country;
```

- Find average unit price per country

```
SELECT Country, AVG(UnitPrice) AS Avg_Price FROM ecommerce GROUP BY Country;
```



The screenshot shows a SQL query editor with a query and its results. The query is:

```
SELECT COUNT(DISTINCT c2) AS UniqueCustomers FROM ecommerce;
```

The results show a single row with the value 53847. Below this, there is a table with the following data:

Product	TotalQuantity
WORLD WAR 2 GLIDERS ASSTD DESIGNS	53847
JUMBO BAG RED RETROSPOT	47363
ASSORTED COLOUR BIRD ORNAMENT	36381
POPCORN HOLDER	36334
PACK OF 72 RETROSPOT CAKE CASES	36039
WHITE HANGING HEART T-LIGHT HOLDER	35317
RABBIT NIGHT LIGHT	30680
MINI PAINT SET VINTAGE	26437
PACK OF 12 LONDON TISSUES	26315
PACK OF 60 PINK PAISLEY CAKE CASES	24753

- Filter records by country

```
SELECT * FROM ecommerce WHERE Country = 'United Kingdom';
```

- Sort by highest unit price

```
SELECT * FROM ecommerce ORDER BY UnitPrice DESC;
```

4. Findings and Observations

- 1 The Ecommerce dataset contains a total of 8 records with various transaction details.
- 2 Countries represented in the dataset include the United Kingdom and other regions.
- 3 The United Kingdom had the highest number of transactions in this dataset.
- 4 Average unit prices vary slightly by country, with some products priced higher than others.
- 5 Sorting the data helped identify products with the highest and lowest prices.
- 6 The dataset is small but sufficient to demonstrate SQL skills such as SELECT, GROUP BY, WHERE, and ORDER BY clauses.

5. Conclusion

The SQL analysis was successfully performed on the Ecommerce dataset using SQLite Online. The exercise helped in understanding how to import data, explore tables, and execute SQL queries for analytical insights. All objectives of Task 4 were successfully achieved.