**10 sql queries related to GE data set:**

**1.To find the Total Customers in each country:**

/\*1. Customer Count in each country\*/

select count (\*) as Customer\_Count, Country from customer

group by Country;

|  |  |
| --- | --- |
| Customer\_Count | Country |
| 1420 | Australia |
| 1553 | Canada |
| 1473 | Germany |
| 670 | France |
| 635 | Italy |
| 733 | Netherlands |
| 1944 | United Kingdom |
| 6828 | United States |

**2.To find the Number of Products in each Category and Subcategory :**

/\*2. Product Count based on Category and Subcategory \*/

select count(\*) as Product\_Count,Category,Subcategory from product

group by Category, Subcategory;

|  |  |  |
| --- | --- | --- |
| Product\_Count | Category | Subcategory |
| 45 | Audio | MP4&MP3 |
| 20 | Audio | Recording Pen |
| 50 | Audio | Bluetooth Headphones |
| 50 | TV and Video | Televisions |
| 26 | TV and Video | VCD & DVD |
| 100 | TV and Video | Home Theater System |
| 46 | TV and Video | Car Video |
| 78 | Computers | Laptops |
| 45 | Computers | Desktops |
| 78 | Computers | Monitors |
| 103 | Computers | Projectors & Screens |
| 101 | Computers | Printers, Scanners & Fax |
| 201 | Computers | Computers Accessories |
| 100 | Cameras and camcorders | Digital Cameras |
| 100 | Cameras and camcorders | Digital SLR Cameras |
| 103 | Cameras and camcorders | Camcorders |
| 69 | Cameras and camcorders | Cameras & Camcorders Accessories |
| 92 | Cell phones | Home & Office Phones |
| 62 | Cell phones | Touch Screen Phones |
| 101 | Cell phones | Smart phones & PDAs |
| 90 | Music, Movies and Audio Books | Movie DVD |
| 46 | Games and Toys | Boxed Games |
| 120 | Games and Toys | Download Games |
| 70 | Home Appliances | Washers & Dryers |
| 86 | Home Appliances | Refrigerators |
| 102 | Home Appliances | Microwaves |
| 31 | Home Appliances | Water Heaters |
| 74 | Home Appliances | Coffee Machines |
| 158 | Home Appliances | Lamps |
| 62 | Home Appliances | Air Conditioners |
| 78 | Home Appliances | Fans |
| 30 | Cell phones | Cell phones Accessories |

**3.To Find the Total Number of Stores in each Country:**

/\*3.Total Stores in each country\*/

select count(\*) as Store\_Count, Country from store

group by Country;

|  |  |
| --- | --- |
| Store\_Count | Country |
| 1 | Online |
| 6 | Australia |
| 5 | Canada |
| 7 | France |
| 9 | Germany |
| 3 | Italy |
| 5 | Netherlands |
| 7 | United Kingdom |
| 24 | United States |

**4.To find the Sales Volume in each Store:**

/\*4. Store Wise Sales Volume\*/

select distinct st.StoreKey,

st.Country,st.State,

COUNT(s.Storekey) AS total\_sales

from sales as s

join store as st on s.StoreKey = st.StoreKey

group by

st.StoreKey, st.State, st.Country

order by total\_sales desc ;

|  |  |  |  |
| --- | --- | --- | --- |
| StoreKey | Country | State | total\_sales |
| 0 | Online | Online | 13165 |
| 9 | Canada | Northwest Territories | 1577 |
| 50 | United States | Kansas | 1519 |
| 55 | United States | Nevada | 1518 |
| 54 | United States | Nebraska | 1498 |
| 61 | United States | South Carolina | 1485 |
| 59 | United States | Oregon | 1472 |
| 45 | United States | Connecticut | 1471 |
| 57 | United States | New Mexico | 1442 |
| 44 | United States | Arkansas | 1436 |
| 65 | United States | West Virginia | 1395 |
| 8 | Canada | Newfoundland and Labrador | 1360 |
| 51 | United States | Maine | 1356 |
| 64 | United States | Washington DC | 1353 |
| 47 | United States | Hawaii | 1348 |
| 43 | United States | Alaska | 1340 |
| 66 | United States | Wyoming | 1295 |
| 48 | United States | Idaho | 1289 |
| 56 | United States | New Hampshire | 1287 |
| 53 | United States | Montana | 1284 |
| 10 | Canada | Nunavut | 1269 |
| 39 | United Kingdom | Blaenau Gwent | 1054 |
| 40 | United Kingdom | Dungannon and South Tyrone | 1050 |
| 36 | United Kingdom | Armagh | 1049 |
| 49 | United States | Iowa | 1041 |
| 38 | United Kingdom | Belfast | 1034 |
| 42 | United Kingdom | North Down | 1017 |
| 29 | Italy | Enna | 1011 |
| 37 | United Kingdom | Ayrshire | 995 |
| 30 | Italy | Pesaro | 976 |
| 63 | United States | Utah | 948 |
| 5 | Australia | Victoria | 892 |
| 22 | Germany | Freistaat ThÃ¼ringen | 800 |
| 62 | United States | South Dakota | 778 |
| 27 | Germany | Sachsen-Anhalt | 721 |
| 24 | Germany | Hessen | 703 |
| 23 | Germany | Hamburg | 674 |
| 19 | Germany | Berlin | 635 |
| 6 | Australia | Western Australia | 615 |
| 33 | Netherlands | Friesland | 498 |
| 32 | Netherlands | Flevoland | 454 |
| 34 | Netherlands | Groningen | 448 |
| 41 | United Kingdom | Fermanagh | 444 |
| 20 | Germany | Brandenburg | 443 |
| 4 | Australia | Tasmania | 431 |
| 31 | Netherlands | Drenthe | 417 |
| 21 | Germany | Freie Hansestadt Bremen | 391 |
| 26 | Germany | Saarland | 295 |
| 1 | Australia | Australian Capital Territory | 292 |
| 15 | France | La RÃ©union | 235 |
| 12 | France | Basse-Normandie | 224 |
| 16 | France | Limousin | 214 |
| 28 | Italy | Caltanissetta | 214 |
| 17 | France | Martinique | 210 |
| 18 | France | Mayotte | 194 |
| 13 | France | Corse | 184 |
| 14 | France | Franche-ComtÃ© | 126 |
| 2 | Australia | Northern Territory | 18 |

**5.To Find the Age of the customers and Grouping the Customers by Age:**

/\*5. finding the Age of the customers and Grouping the Customers by Age \*/

with Agedata as

(select CustomerKey,Name,Birthday, Date\_format(from\_days(datediff(now(),Birthday)),'%y') as Age

from customer),

Groupage as

(select CustomerKey,Name,Birthday,Age,

case

when Age<=30 then 'Under 30'

when Age between 31 and 50 then '31-50'

when Age >50 then 'Over 50'

end as Age\_Category

from Agedata)

select count(\*) as Customer\_Count ,Age\_Category

from Groupage

group by Age\_Category;

|  |  |
| --- | --- |
| Customer\_Count | Age\_Category |
| 8770 | Over 50 |
| 4534 | 31-50 |
| 1952 | Under 30 |

**6. To find the Top Customers based on the Sales:**

/\*6.Most Valuable customers based on the product sales\*/

SELECT

s.CustomerKey,

c.Name,c.Country,

ROUND(SUM(s.Quantity \* p.Unit\_Price\_USD \* s.Exchange), 2) AS Total\_Spent

FROM

sales s

JOIN

product p ON s.ProductKey = p.ProductKey

JOIN

customer c ON s.CustomerKey= c.CustomerKey

GROUP BY

s.CustomerKey, c.Name

ORDER BY

Total\_Spent DESC

LIMIT 10;

|  |  |  |  |
| --- | --- | --- | --- |
| CustomerKey | Name | Country | Total\_Spent |
| 1702221 | Matthew Flemming | United States | 61871.7 |
| 262871 | Roy Le | Canada | 49726.46 |
| 1884663 | Karen Jones | United States | 43517.8 |
| 1969704 | Zrina Topic | United States | 42788.04 |
| 149955 | Jaxon Fyans | Australia | 42270.24 |
| 220519 | Jodi Hernandez | Canada | 42163.71 |
| 396944 | Zane Belgrave | Canada | 40301.05 |
| 70912 | Evie Wieck | Australia | 38676.5 |
| 143033 | Mitchell Woodriff | Australia | 38272.36 |
| 1928466 | Dennis Weissmuller | United States | 38191.06 |

**7.To find the Top Products based on the Sales:**

/\*7. top products based on their sales value \*/

SELECT

p.ProductKey,

p.Product\_Name,

p.Unit\_Price\_USD,

p.Category,

round(SUM(s.Quantity \* p.Unit\_Price\_USD \* s.Exchange),2) AS Total\_Sales\_value

FROM

sales s

JOIN

product p ON s.ProductKey = p.ProductKey

GROUP BY

p.ProductKey, p.Unit\_Price\_USD

ORDER BY

total\_sales\_value DESC

LIMIT 10;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ProductKey | Product\_Name | Unit\_Price\_USD | Category | Total\_Sales\_value |
| 444 | WWI Desktop PC2.33 X2330 Black | 919 | Computers | 500900.95 |
| 428 | Adventure Works Desktop PC2.33 XD233 Brown | 969 | Computers | 459228.48 |
| 416 | Adventure Works Desktop PC2.33 XD233 Silver | 969 | Computers | 458046.3 |
| 422 | Adventure Works Desktop PC2.33 XD233 Black | 969 | Computers | 442086.87 |
| 433 | Adventure Works Desktop PC2.33 XD233 White | 969 | Computers | 433627.5 |
| 455 | WWI Desktop PC2.33 X2330 White | 919 | Computers | 417391.42 |
| 450 | WWI Desktop PC2.33 X2330 Brown | 919 | Computers | 416325.38 |
| 147 | Adventure Works 52 LCD HDTV X590 White" | 2899.99 | TV and Video | 381116.69 |
| 146 | Adventure Works 52 LCD HDTV X590 Black" | 2899.99 | TV and Video | 375026.71 |
| 438 | WWI Desktop PC2.33 X2330 Silver | 919 | Computers | 355074.03 |

**8.To find the Top Products based on their Sales Volume(Quantity):**

/\*8. top products based on their Sales Volume\*/

SELECT

p.ProductKey,

p.Product\_Name,

p.Unit\_Price\_USD,

p.Category,

sum(s.Quantity) AS Total\_Quantity\_Sold

FROM product p

JOIN

sales s ON p.ProductKey = s.ProductKey

GROUP BY

p.ProductKey, p.Unit\_Price\_USD

ORDER BY

Total\_Quantity\_Sold DESC;

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ProductKey | Product\_Name | Unit\_Price\_USD | Category | Total\_Quantity\_Sold |
| 444 | WWI Desktop PC2.33 X2330 Black | 919 | Computers | 550 |
| 458 | WWI Desktop PC1.80 E1800 White | 229.9 | Computers | 538 |
| 424 | Adventure Works Desktop PC1.60 ED160 Black | 269.95 | Computers | 521 |
| 434 | Adventure Works Desktop PC2.30 MD230 White | 599 | Computers | 521 |
| 425 | Adventure Works Desktop PC1.80 ED180 Black | 369 | Computers | 520 |
| 423 | Adventure Works Desktop PC2.30 MD230 Black | 599 | Computers | 514 |
| 446 | WWI Desktop PC1.60 E1600 Black | 219.95 | Computers | 509 |
| 440 | WWI Desktop PC1.60 E1600 Silver | 219.95 | Computers | 507 |
| 435 | Adventure Works Desktop PC1.60 ED160 White | 269.95 | Computers | 505 |
| 452 | WWI Desktop PC1.60 E1600 Red | 219.95 | Computers | 505 |

**9. To find the Top Countries which is high in Sales:**

/\*9.countries which has high sales\*/

SELECT

c.Country,

ROUND(SUM(s.Quantity \* p.Unit\_Price\_USD \* s.Exchange), 2) AS Total\_Spent

FROM

sales s

JOIN

product p ON s.ProductKey = p.ProductKey

JOIN

customer c ON s.CustomerKey= c.CustomerKey

GROUP BY

c.Country

ORDER BY

Total\_Spent DESC

LIMIT 5;

|  |  |
| --- | --- |
| Country | Total\_Spent |
| United States | 29871631.17 |
| Canada | 6217524.61 |
| United Kingdom | 5449075.37 |
| Germany | 4775678.94 |
| Australia | 3779687.45 |

**10. To find the Sales based on the Brand:**

/\*10.Brand-Wise Sales\*/

SELECT

p.Brand,

SUM(s.Quantity) AS TotalQuantitySold

FROM

product p

JOIN

sales s

ON

p.ProductKey = s.ProductKey

GROUP BY

p.Brand

ORDER BY

TotalQuantitySold DESC;

|  |  |
| --- | --- |
| Brand | TotalQuantitySold |
| Contoso | 49827 |
| Wide World Importers | 27413 |
| Southridge Video | 24814 |
| Adventure Works | 20099 |
| The Phone Company | 18764 |
| Tailspin Toys | 17455 |
| Fabrikam | 11384 |
| Proseware | 9427 |
| Northwind Traders | 7610 |
| A. Datum | 5655 |
| Litware | 5309 |