**Query Project MySQL**

**Querys list:**

1. Count Payment methods
2. Average Spending
3. Top 5 Total spending for each costumer
4. Number of orders per day of the week
5. Supplyer product quantity and sold
6. Best selling products
7. Favourites categories per age group
8. Top 10 identikits
9. Distinct product per warehouse

**#1 Average Spending**

**SELECT**

**AVG(total\_spent) AS avg\_spending**

**FROM**

**(SELECT tblcustomer.customername, SUM(tblorder.orderquantity \* tblproduct.productprice) AS total\_spent**

**FROM tblorder**

**JOIN tblproduct ON tblorder.tblproduct\_productid = tblproduct.productid**

**JOIN tblcustomer ON tblorder.tblcustomer\_customerid = tblcustomer.customerid**

**GROUP BY tblcustomer.customername) AS customer\_spending;**

**#2 Top 5 Total spending for each costumer**

**SELECT tblcustomer.customername,**

**tblcustomer.customerage,**

**tblcustomer.customergender,**

**SUM(tblorder.orderquantity\*tblproduct.productprice) AS totale\_spesa**

**FROM tblorder**

**JOIN tblproduct ON tblorder.tblproduct\_productid = tblproduct.productid**

**JOIN tblcustomer ON tblorder.tblcustomer\_customerid = tblcustomer.customerid**

**GROUP BY tblcustomer.customerid**

**ORDER BY totale\_spesa DESC**

**LIMIT 5;**

**#3 Number of orders per day of the week**

**SELECT DAYNAME(dateday) AS day\_of\_week, COUNT(orderid) AS total\_orders**

**FROM tblorder**

**JOIN tbldate ON tblorder.tbldate\_dateid = tbldate.dateid**

**GROUP BY DAYNAME(dateday);**

**# supplyer product quantity and sold**

**SELECT tblsupplyer.supplyername, SUM(tblorder.orderquantity) AS total\_quantity, ROUND(SUM(tblorder.orderquantity \* tblproduct.productprice),0) AS total\_sold**

**FROM tblorder**

**JOIN tblproduct ON tblorder.tblproduct\_productid = tblproduct.productid**

**JOIN tblsupplyer ON tblproduct.tblsupplyer\_supplyerid = tblsupplyer.supplyerid**

**GROUP BY tblsupplyer.supplyername**

**ORDER BY total\_sold DESC;**

**#4 best selling product**

**SELECT tblproduct.productname, SUM(tblorder.orderquantity) AS TotalQuantity**

**FROM tblorder**

**JOIN tblproduct ON tblorder.tblproduct\_productid = tblproduct.productid**

**GROUP BY tblproduct.productname**

**ORDER BY TotalQuantity DESC**

**LIMIT 10;**

**# method of payments**

**SELECT tblpaymentmethod.paymentmethodname, COUNT(orderid) AS num\_of\_orders**

**FROM tblorder**

**JOIN tblpaymentmethod ON tblorder.tblpaymentmethod\_paymentmethodid = tblpaymentmethod.paymentmethodid**

**GROUP BY tblpaymentmethod.paymentmethodname;**

**#6 favourites categorys per age group**

**WITH RankedCategories AS (**

**SELECT**

**categoryname,**

**CASE**

**WHEN customerage BETWEEN 18 AND 30 THEN '18-30'**

**WHEN customerage BETWEEN 31 AND 50 THEN '31-50'**

**WHEN customerage BETWEEN 51 AND 65 THEN '51-65'**

**ELSE '65+'**

**END AS age\_group,**

**SUM(tblorder.orderquantity) AS orders\_count,**

**ROW\_NUMBER() OVER (**

**PARTITION BY**

**CASE**

**WHEN customerage BETWEEN 18 AND 30 THEN '18-30'**

**WHEN customerage BETWEEN 31 AND 50 THEN '31-50'**

**WHEN customerage BETWEEN 51 AND 65 THEN '51-65'**

**ELSE '65+'**

**END**

**ORDER BY SUM(tblorder.orderquantity) DESC) AS ranking**

**FROM tblorder**

**JOIN tblproduct ON tblorder.tblproduct\_productid = tblproduct.productid**

**JOIN tblcategory ON tblproduct.tblcategory\_categoryid = tblcategory.categoryid**

**JOIN tblcustomer ON tblorder.tblcustomer\_customerid = tblcustomer.customerid**

**GROUP BY categoryname, age\_group**

**)**

**SELECT categoryname, age\_group, orders\_count**

**FROM RankedCategories**

**WHERE ranking <= 2**

**ORDER BY age\_group ASC, orders\_count DESC;**

**#7 customer per region, gender and age**

**SELECT**

**CASE**

**WHEN customerregion IN ('Piemonte', 'Valle d\'Aosta', 'Liguria', 'Lombardia') THEN 'Nord-Ovest'**

**WHEN customerregion IN ('Trentino-Alto Adige', 'Veneto', 'Friuli Venezia Giulia', 'Emilia-Romagna') THEN 'Nord-Est'**

**WHEN customerregion IN ('Toscana', 'Umbria', 'Marche', 'Lazio') THEN 'Centro'**

**ELSE 'Sud e Isole'**

**END AS geographic\_area,**

**CASE**

**WHEN customerage BETWEEN 18 AND 30 THEN '18-30'**

**WHEN customerage BETWEEN 31 AND 50 THEN '31-50'**

**WHEN customerage BETWEEN 51 AND 65 THEN '51-65'**

**ELSE '65+'**

**END AS age\_group,**

**CASE**

**WHEN customergender = 'M' THEN 'Male'**

**ELSE 'Female'**

**END AS gender\_category,**

**SUM(tblorder.orderquantity \* tblproduct.productprice) AS total\_spending**

**FROM tblorder**

**JOIN tblcustomer ON tblorder.tblcustomer\_customerid = tblcustomer.customerid**

**JOIN tblproduct ON tblorder.tblproduct\_productid = tblproduct.productid**

**GROUP BY**

**geographic\_area,**

**age\_group,**

**gender\_category**

**ORDER BY total\_spending DESC**

**LIMIT 10;**

**#8 distinct product per warehouse**

**SELECT tblwarehouse.warehousename,**

**COUNT(DISTINCT tblproduct\_has\_tblwarehouse.tblproduct\_productid) AS product\_count**

**FROM tblproduct\_has\_tblwarehouse**

**JOIN tblwarehouse ON tblwarehouse.warehouseid = tblproduct\_has\_tblwarehouse.tblwarehouse\_warehouseid**

**WHERE tblproduct\_has\_tblwarehouse.stock > 0**

**GROUP BY tblwarehouse.warehousename;**