

```
1 use store
2 ---Retrieve all columns from the Customer table.
3 Select * from customers
4
5 ---Display the names of all customers.
6 Select distinct customername from customers
7
8 ---Show the unique cities in the Customer table.
9 Select distinct city from customers
10
11 ---Count the number of male and female customers.
12 Select
13 gender,
14 count (gender)
15 From customers
16 Group by gender
17
18 ----List the names and ages of customers in Bangalore.
19 Select customername, age from customers
20 Where city='bangalore'
21
22 ---Calculate the average age of customers.
23 Select avg(age ) from customers
24
25 ---Find the total quantity of products ordered.
26 Select sum(quantity) as total_quantity_ordered from orders
27
28 ---Show the customer names and the products they ordered.
29 Select c.customername ,p.productname
30 from customers c
31 Join orders o on o.customerid=c.customerid
32 join Products p on o.productid=p.productid
33
34 --- Display the product names and their respective categories.
35 Select productname, catagory from products
36 order by 2
37
38 ---- Find the highest price among all products.
39 Select productname ,price from products
40 where price = (select max(price) from products)
41
42 ----List the customers who are older than 30 years.
43 Select customername,age from customers where age >30
44
45 ---Calculate the total number of customers in each city.
46 Select City, count (customerid) from
47 Customers group by city
48
49 ---Show the product names and their prices in descending order.
50 Select productname, price from products
51 Order by price desc
52
53 ---Display the names of customers who ordered a laptop.
54 Select c.customername from customers c
55 Join orders o on o.customerid=c.customerid join
56 Products p on o.productid=p.productid
57 Where p.productname='laptop'
58
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59 ---Find the customers who ordered more than 2 products.
60 Select c.customername ,count(o.orderid) from customers c
61 Join orders o on o.customerid=c.customerid
62 group by c.customername
63 Having count(o.orderid)>2
64
65 ---Calculate the total quantity of each product ordered.
66 Select p.productname,sum(o.quantity) as total_quantity
67 from orders o join
68 Products p on o.productid=p.productid
69 group by p.productname
70 Order by 2 desc
71
72 ---List the names of customers who ordered a product priced over $100.
73 Select c.customername from customers c
74 Join orders o on o.customerid=c.customerid join
75 Products p on o.productid=p.productid
76 Where p.price>100
77
78 --- Show the names and ages of female customers in Pune.
79 Select customername,age,city from customers
80 Where gender='female' and city='pune'
81
82 ---Display the customer names and the date of their orders.
83 Select c.customername,o.date from customers c
84 Join orders o on o.customerid=c.customerid
85 order by 2
86
87 ---Find the average price of products.
88 Select productname,avg(price) from
89 Products group by productname
90
91 -- List the customers who ordered products in ascending order of age.
92 Select distinct c.customername,c.age from customers c
93 Join orders o on o.customerid=c.customerid
94 Order by age
95
96 ---Calculate the total price of each order.
97 Select o.orderid,o.quantity * p.price as total_price
98 from orders o
99 join
100 Products p on o.productid=p.productid
101 order by 2 desc
102
103 ---Find the product names and categories ordered by the customers.
104 Select c.customername ,p.productname,p.catagory from customers c
105 Join orders o on o.customerid=c.customerid join
106 Products p on o.productid=p.productid
107
108 ---Show the customer names and the total price of their orders.
109 Select c.customername ,sum(o.quantity * p.price) as total_price from customers c
110 Join orders o on o.customerid=c.customerid join
111 Products p on o.productid=p.productid
112 group by c.customername
113 order by 2 desc
114
115 ----List the products with prices greater than the average price.
116 Select productname ,price from products
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117 Where price > (select avg(price) from products)
118
119
120 ---Find the product categories and the number of products in each category.
121 Select catagory,count(productname) from
122 Products group by catagory
123
124 ---Show the customers who ordered products on August 5th, 2023.
125 Select c.customername ,o.date from customers c
126 Join orders o on o.customerid=c.customerid where date='2023-08-5'
127
128
129 ----Display the customers who ordered products in the 'Electronics' category.
130 Select c.customername from customers c
131 Join orders o on o.customerid=c.customerid join
132 Products p on o.productid=p.productid
133 Where p.catagory='electronics'
134
135 ---Find the customers who ordered the same product more than once.
136
137 with moreorders as (
138 Select o.customerid ,count(o.orderid) as totalorders from orders o
139 Join orders o1 on o.customerid=o1.customerid and o.orderid<>o1.orderid and
140 o.productid=o1.productid
141 Group by o.customerid
142 Having count(o.orderid)>1)
143
144 select c.customerid,c.customername,m.totalorders from customers c
145 join moreorders m on c.customerid=m.customerid
146
147 ---List the products ordered by male customers older than 30.
148 Select c.customername,c.gender,c.age,p.productname from customers c
149 Join orders o on o.customerid=c.customerid join
150 Products p on o.productid=p.productid
151 Where c.gender='male' and c.age>30
152
153 ----Calculate the total quantity and total price for each order.
154 Select o.orderid,p.productname,p.price,o.quantity,p.price * o.quantity as total_price
155 from customers c
156 Join orders o on o.customerid=c.customerid join
157 Products p on o.productid=p.productid
158 Order by 5 desc
159
160 ----List the products ordered along with their quantities and total prices.
161 Select p.productname,p.price,sum(o.quantity),sum( p.price * o.quantity) as total_price
162 from customers c
163 Join orders o on o.customerid=c.customerid join
164 Products p on o.productid=p.productid
165 group by p.productname,p.price
166 Order by 4 desc
167
168 ----Calculate the average age of male customers.
169 Select avg(age) from customers
170 Where gender='male'
171
172 ---Display the names of customers who ordered the same product as 'Laptop'.
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172 SELECT DISTINCT c.customername
173 FROM customers c
174 JOIN orders o ON c.customerid = o.customerid
175 JOIN products p ON o.productid = p.productid
176 WHERE p.productname = 'Laptop';
177
178 ---List the product names that were not ordered by any customer.
179 Select productid from products where
180 Productid not in (select distinct productid from orders)
181
182
183 ----Show the customer names who placed orders on August 1st, 2023, and August 5th, 2023.
184 Select c.customername ,o.date from customers c
185 Join orders o on o.customerid=c.customerid
186 Where date='2023-08-1' or date='2023-08-05'
187
188 ----For each customer, calculate the total number of products they have ordered in each >
189 category.
190 ----Display the customer name, category name, and the total number of products ordered >
191 in that category.
192 ---Show only the top category for each customer.
193
194 Select top 10 c.customername,p.catagory, count (p.productname) from customers c
195 Join orders o on o.customerid=c.customerid join
196 Products p on o.productid=p.productid
197 Group by c.customername,p.catagory
198 Order by 3 desc
199
200 ---Calculate the Customer Lifetime Value (CLTV) for each customer.
201 ---CLTV is defined as the total amount a customer has spent on products divided by the >
202 number of days between their first and last order.
203 ---Display the customer name and their CLTV, ordered in descending order of CLTV.
204
205 SELECT
206     c.customername,
207     sum(o.quantity * p.price)/abs(DATEDIFF(day,MAX(o.date), MIN(o.date))) as cltv
208 FROM customers c
209 join orders o ON o.customerid = c.customerid
210 join products p on o.productid=p.productid
211 group by c.customername
212 order by 2 desc
213
214
215 /* Find the customers who have placed orders for at least 3 different categories.
216 Display the customer name and the number of categories they have ordered from. */
217
218 SELECT c.customername,count(p.catagory)
219 FROM customers c
220 JOIN orders o ON c.customerid = o.customerid
221 JOIN products p ON o.productid = p.productid
222 group by c.customername
223 having count(p.catagory)>3
224
225
226 /*Calculate the month and year when each customer made their first order.
227 Display the customer name and the month and year of their first order, ordered >
228 chronologically. */
229
230 select c.customername,concat(year(min(o.date)),'-',month(min(o.date)))
231 from orders o
232 join customers c on o.customerid=c.customerid

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226 group by c.customername
227 order by 2
228
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