

More SQL Queries

Consider the following schema:

Trouser(tcode, price, category)

dom(category) = ('on-offer', 'normal', 'luxury')

Customer(cid, name)

Sell(date, tcode, cid, discount)

DateTable(date, week)

This is the schema of a database where the sales of a trouser shop are recorded. The relation **Trouser** stores the price and category of a trouser. The relation **Sell** stores which customer has bought which trouser on which date with which discount. The relation **DateTable** associates to every date the corresponding week. Finally, **Customer** records the names of customers.

Express the following questions as SQL queries over that schema.

1. Select the names of the customers who in one day bought at least three trousers of different prices.
2. Select the trousers that were sold with the highest discount.
3. Select the customers who bought in one week at least three trousers of different price categories.
4. Select the trousers that were sold the highest number of times.
5. Select, for each price, the customer who bought the highest number of trousers for the price.
6. Select, for each category, the customer who bought the lowest number of different trousers in that category.

7. Select the luxury trousers that have been sold at least two times every week.
8. Select the trousers on offer that have been sold during the week after Christmas (week 52) a number of times below the average of any trouser at any week.