Q	**Natural Language Description**
Q_1	Please provide a second-hand manual BMW car whose price is smaller than €10000. Moreover, please rank these cars by a hierarchical sorting function, *i.e.,* order by year in descending order first, then order by kilometer in ascending order, then order by price in ascending order, and order by power in descending order finally.
Q_2	Please provide a second-hand petrol Volkswagen limousine which is offered by a private seller after year 2000 and is included in the control group in the A/B test on the Ebay website. Besides, the price of the car should be smaller than €100000, the gearbox is manually, the power is bigger than 150 PS, the kilometers the car has driven should be smaller than 150000, and the car should not have a damage which is not yet repaired. Please also rank these cars by a function -0.018 $*$ price + 0.06 $*$ year + 0.982 $*$ powerPS - 0.001 $*$ kilometer in descending order.
Q_3	Please provide a second-hand BMW or Audi car. Moreover, please rank these cars by a hierarchical sorting function, *i.e.,* order by attribute notRepairedDamage in descending order first, then order by vehicleType in descending order, then order by fuelType in descending order, then order by brand in descending order, and finally order by a weighted sum function -0.018 $*$ price + 0.982 $*$ powerPS in descending order. *Remark.* Users may have preferences for different categorical values. For attribute notRepairedDamage, we have: no $\succ$ yes; For attribute vehicleType, we have: limousine $\succ$ suv $\succ$ small $\succ$ station wagon $\succ$ bus $\succ$ cabrio $\succ$ coupe $\succ$ other; For attribute fuelType, we have: petrol $\succ$ electro $\succ$ diesel $\succ$ lpg $\succ$ cng $\succ$ hybrid $\succ$ other; For attribute brand, we have: volkswagen $\succ$ bmw $\succ$ opel $\succ$ mercedes_benz $\succ$ audi $\succ$ ford $\succ$ renault $\succ$ peugeot $\succ$ fiat $\succ$ seat $\succ$ mazda $\succ$ skoda $\succ$ smart $\succ$ citroen $\succ$ nissan $\succ$ toyota $\succ$ hyundai $\succ$ mini $\succ$ volvo $\succ$ mitsubishi $\succ$ honda $\succ$ kia $\succ$ alfa_romeo $\succ$ suzuki $\succ$ porsche $\succ$ chevrolet $\succ$ chrysler $\succ$ dacia $\succ$ jeep $\succ$ daihatsu $\succ$ subaru $\succ$ land_rover $\succ$ jaguar $\succ$ trabant $\succ$ daewoo $\succ$ saab $\succ$ rover $\succ$ lancia $\succ$ lada $\succ$ other
Q_4	Please provide a car whose price is smaller than €100, or a car which is included in the test group in the A/B test, or a suv car, or a car which is sold in Ebay in 2018, or a car whose power is bigger than 1500 PS, or a car whose model is verso, or a car which has driven smaller than 5000 kilometers, or a car whose brand is volvo. Please also rank these cars by a hierarchical sorting function, *i.e.,* order by year in descending order first, then order by kilometer in ascending order, and finally order by a weighted sum function -0.018 $*$ price + 0.982 $*$ powerPS in descending order.
Q_5	Please provide a car whose brand is not BMW. Moreover, please rank these cars by a weighted sum function -0.018 $*$ price + 0.06 $*$ year + 0.982 $*$ powerPS - 0.001 $*$ kilometer in descending order.
Q_6	Please provide a BMW car whose price is smaller than €10000, or a Volkswagen car. Please rank them by a hierarchical sorting function, *i.e.,* order by year in descending order first, then order by kilometer in ascending order, then order by price in ascending order, and order by power in descending order finally.
Q_7	Please provide a manual petrol second-hand car that is sold after year 2010, and its brand can be either BMW with price smaller than 10000, or Volkswagen with price smaller than 8000. Moreover, please rank these cars by a hierarchical sorting function, *i.e.,* order by attribute notRepairedDamage in descending order first, then order by vehicleType in descending order, then order by fuelType in descending order, then order by brand in descending order, and finally order by a weighted sum function -0.018 $*$ price + 0.982 $*$ powerPS in descending order. *Remark.* The user's preferences for categorical values are the same with Q_3.
Q_8	Please provide a manual non-petrol second-hand car that is sold after year 2010, and its brand can be either BMW with price $\leq$ 10000, or Volkswagen with price $\leq$ 8000. Please also rank these cars by a hierarchical sorting function, *i.e.,* order by year in descending order first, then order by kilometer in ascending order, and finally order by a weighted sum function -0.018 $*$ price + 0.982 $*$ powerPS in descending order.
Q_9	Please provide a paper which is published in SIGMOD 2018 by top 10 USA institutions. Moreover, please rank these papers by a weighted sum function -0.8 $*$ rank + 0.2 $*$ year in descending order.
Q_{10}	Please provide a paper which is about data visualization or published in SIGMOD 2018. Moreover, please rank these papers by a weighted sum function -0.8 $*$ rank + 0.2 $*$ year in descending order.
Q_{11}	Please provide a paper whose name contains "machine learning", or a paper which is produced by INSTITUTION1, or INSTITUTION2, or INSTITUTION3, or a paper whose production country is COUNTRY1 or COUNTRY2. Moreover, please rank these papers by a hierarchical sorting function, *i.e.,* order by attribute rank in ascending order first, then order by year in descending order.
Q_{12}	Please provide a line item in REGION1. Besides, the order date of the line item is between DATE1 and DATE2, the quantity is between QUANTITY1 and QUANTITY1, the order priority is ORDERPRIORITY1, the ship instruct is SHIPINSTRUCT1, the order price of the line item is between TOTALPRICE1 and TOTALPRICE2, and the account balance of the supplier is bigger than ACCTBAL1. Moreover, please rank these line items by a hierarchical sorting function, *i.e.,* order by extended price of line item in ascending order first, then order by quantity of line item in descending order, and finally order by commit date of line item in descending order.
Q_{13}	Please provide a part whose size is bigger than SIZE1, or a part whose size is smaller than SIZE2, or a part whose type is TYPE1, or a part whose name is PART1, or a part whose supplier region is REGION1, or a part whose supplier name is SUPPLIER1, or a part whose supply cost is bigger than SUPPLYCOST1, or a part whose supply cost is smaller than SUPPLYCOST2, or a part whose container is CONTAINER1, or a part whose brand is BRAND1. Moreover, please rank these parts by a hierarchical sorting function, *i.e.,* order by account balance of the supplier in descending order first, then order by supply cost in ascending order.
Q_{14}	Please provide an ordered part whose brand is BRAND1 and container is CONTAINER1, or CONTAINER2, or CONTAINER3, or CONTAINER4. Besides, the order quantity of the part is between QUANTITY1 and QUANTITY1+10, ship instruct is SHIPINSTRUCT1, size is between SIZE1 and SIZE2, and ship mode is SHIPMODE1 or SHIPMODE2. Moreover, please rank these parts by the product of the extended price of line item and the discount of line item in descending order.

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Q_{15}	Please provide an ordered part, where the brand of the part is BRAND1, the container is CONTAINER1, or CONTAINER2, or CONTAINER3, or CONTAINER4, the order quantity is between QUANTITY1 and QUANTITY1+10, the ship instruct is SHIPINSTRUCT1, the size is between SIZE1 and SIZE2, and the ship mode is SHIPMODE1 or SHIPMODE2; or the brand of the part is BRAND2, the container is CONTAINER5, or CONTAINER6, or CONTAINER7, or CONTAINER8, the order quantity is between QUANTITY2 and QUANTITY2+10, the ship instruct is SHIPINSTRUCT2, the size is between SIZE3 and SIZE4, and the ship mode is SHIPMODE3 or SHIPMODE4; or the brand of the part is BRAND3, the container is CONTAINER9, or CONTAINER10, or CONTAINER11, or CONTAINER12, the order quantity is between QUANTITY3 and QUANTITY3+10, the ship instruct is SHIPINSTRUCT3, the size is between SIZE5 and SIZE6, and the ship mode is SHIPMODE5 or SHIPMODE6. Moreover, please rank these parts by the product of the extended price of line item and one minus the discount of line item in descending order.