1. Provide SQL to show all inventory records sorted by Make

SELECT \* FROM INVENTORY ORDER BY MAKE;

1. Provide SQL to show all inventory records sorted by Make (Alphabetic order) and Cost (Highest cost at top)

SELECT \* FROM INVENTORY ORDER BY MAKE ASC , COST DESC;

1. Provide SQL to show all HONDA cars

SELECT \* FROM INVENTORY WHERE MAKE='HONDA';

1. Provide SQL to show all HONDA cars before 2011 year

SELECT \* FROM INVENTORY WHERE MAKE='HONDA' AND YEAR<2011;

1. Provide SQL to show all HONDA or BMW cars 2011 or beyond

SELECT \* FROM INVENTORY WHERE MAKE IN ('HONDA', 'BMW') AND YEAR>2011;

1. Provide SQL to show total cost of all Honda cars

SELECT SUM(COST) TOTAL\_COST FROM INVENTORY WHERE MAKE ='HONDA';

1. Provide SQL to show total cost of cars grouped by MAKE and YEAR

SELECT SUM(COST)TOTAL\_COST, MAKE, YEAR FROM INVENTORY GROUP BY MAKE, YEAR;

1. Provide SQL to show all car makes with count of cars for each make

SELECT MAKE, COUNT(MAKE) COUNT FROM INVENTORY GROUP BY MAKE;

1. Provide SQL to show all cars makes and year with counts of car for each MAKE and YEAR

SELECT MAKE, YEAR ,COUNT(MAKE) COUNT FROM INVENTORY GROUP BY MAKE,YEAR;

1. Provide SQL to show all cars having more than 1 car for same make and year e.g. 2 Honda 2011

SELECT MAKE, YEAR ,COUNT(MAKE) COUNT FROM INVENTORY GROUP BY MAKE,YEAR HAVING COUNT(MAKE)>1;

1. Provide SQL to show cars for having max number of items by make
2. Provide SQL to show cars with cost between $22000 and $30000

SELECT \* FROM INVENTORY WHERE COST BETWEEN 22000 AND 30000;

1. Provide SQL to find most expensive car

SELECT \* FROM INVENTORY AS I1

WHERE 1= (SELECT COUNT(DISTINCT I2.COST ) FROM INVENTORY AS I2 WHERE I1.COST <=I2.COST);

1. Provide SQL to find 2nd most expensive car

SELECT \* FROM INVENTORY AS I1

WHERE 2= (SELECT COUNT(DISTINCT I2.COST ) FROM INVENTORY AS I2 WHERE I1.COST <=I2.COST);

1. Provide SQL to find most expensive and least expensive cars

SELECT MAKE,MAX(COST) FROM INVENTORY

UNION

SELECT MAKE,MIN(COST) FROM INVENTORY ;

1. Provide SQL to find who put max number of bids

SELECT OFFERED\_BY,MAX(CUNT) FROM (SELECT OFFERED\_BY,COUNT(OFFERED\_BY) AS CUNT FROM Auction GROUP BY OFFERED\_BY);

1. Provide SQL to find who won max number of cars in auction

SELECT MAX(OFFERED\_BY) FROM (SELECT \* FROM Auction GROUP BY Itemid HAVING MAX(OFFER));

1. Provide SQL to show which car had max number of bids
2. Provide SQL to show which cars did not have any bids
3. Provide SQL to show all cars with their corresponding bids
4. Provide SQL to show all cars with their max bid
5. Provide SQL to calculate Profit or loss for each car
6. Provide SQL to show AVERAGE bid for each car
7. How would you change the table model if we had to keep track of status of each car’s auction?
8. How would you change the table model if we had to maintain the history of price changes of a car in Inventory?

SQL Questions

- Outer joins

- Aggregate functions

- Difference between Union and Union All

- Case statements

- Time calculations