Q: How many distinct buyers made a purchase in the first half of the month?

SELECT COUNT(DISTINCT BuyerID) AS "Number of Buyers"

FROM orders

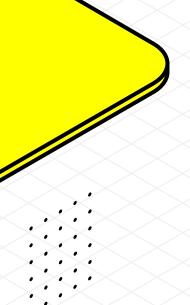
WHERE OrderDate BETWEEN '2022-11-01' AND '2022-11-15';

List all of sellers and their relevant information that are located in the following Southeastern states: North/South Carolina, Tennessee.

SELECT *

FROM Sellers

WHERE State IN ('North Carolina', 'South Carolina', 'Tennessee')



Q: Compare the number of sales between each season of apparel.

Select Season, count(OrderID) as "Number of Sales"

FROM items, apparel

WHERE items.ProductID = apparel.ProductID AND FinalSellPrice > 0

GROUP BY season

ORDER BY `Number of Sales` DESC;



Q: List how many times each style of shoe has been purchased in descending order.

SELECT Style, count(*) AS "Number of Sales"
FROM items INNER JOIN shoes
ON items.ProductID = shoes.ProductID
WHERE FinalSellPrice > 0
GROUP BY Style
ORDER BY `Number of Sales` DESC;

SQL #5

Q: What state was the buyer with the most bids from? What state was the seller with the most bids on their items from?

SELECT b.BuyerID AS "Buyer/Seller ID", b.State, mxcnt AS "Number of Bids"

FROM buyers b RIGHT JOIN

(SELECT a.BuyerID, count(*) mxcnt

FROM auction a GROUP BY BuyerID

ORDER BY mxcnt desc LIMIT 1) s

ON s.BuyerID = b.BuyerID

UNION

SELECT S.SellerID, S.State, mxcnt AS "Number of Bids"

FROM sellers S RIGHT JOIN

(SELECT SellerID, count(*) mxcnt

FROM auction GROUP BY SellerID

ORDER BY mxcnt DESC LIMIT 1) B ON S.SellerID = B.SellerID;

Q: Display the most popular product (most number of bids) and its relevant information.

SELECT auction. ProductID, ProductName, RetailPrice, BrandName,

MAX(bidcounts.BidCount) AS "Number of Bids"

FROM auction LEFT JOIN

(SELECT ProductID, COUNT(ProductID) AS "BidCount" FROM auction

GROUP BY ProductID) AS bidcounts

ON auction.ProductID = bidcounts.ProductID

LEFT JOIN products on auction.ProductID = bidcounts.ProductID;

SQL #7

Q: Report the number of bids posted throughout the day, given the following groups: Early Morning (12AM - 6AM), Morning (6 AM - 12PM),

Afternoon (12PM - 5PM), Evening (5PM - 12AM)

SELECT TimeGroup, count(TimeGroup) AS "Number of Bids"

FROM auction JOIN

(SELECT BidTime,

(CASE

WHEN BIDTIME BETWEEN '00:00:00' AND '06:00:00' THEN 'Early Morning'

WHEN BIDTIME BETWEEN '06:00:01' AND '12:00:00' THEN 'Morning'

WHEN BidTime BETWEEN '12:00:01' AND '17:00:00' THEN 'Afternoon'

ELSE 'Evening'

END) AS TimeGroup

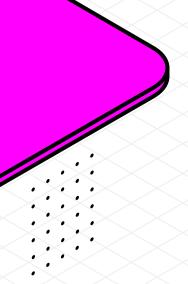
FROM auction) AS TimeGroup2 ON auction.BidTime = TimeGroup2.BidTime

GROUP BY TimeGroup

ORDER BY "Number of Bids" DESC;

Q: Inflation has hit. Update the retail price of all Nike and Adidas shoes by 7.7% (truncate to nearest dollar).

CREATE TABLE products2 LIKE products;
INSERT INTO products2 SELECT * FROM products;
UPDATE products2
SET RetailPrice = RetailPrice * 1.077
WHERE BrandName IN ('Nike', 'Adidas')



Q: List the top 5 sellers with the highest total sales.

SELECT SellerID, SUM(FinalSellPrice) AS 'Total Sales'
FROM items
WHERE FinalSellPrice > 0
GROUP BY SellerID
ORDER BY `Total Sales` DESC LIMIT 5;



Q: List the orders that contain more than one item in them and include the associated product information.

SELECT items.OrderID, orders.BuyerID, products.ProductID, products.ProductName, products.RetailPrice, FinalSellPrice, orders.OrderDate, orders.ProcessingFee, orders.ShippingFee, orders.SalesTax, orders.OrderTotal FROM items LEFT JOIN (SELECT OrderID, COUNT(OrderID) FROM items WHERE FinalSellPrice > 0 GROUP BY OrderID HAVING COUNT(OrderID)>1) AS A ON items.OrderID = A.OrderID LEFT JOIN products on products.ProductID = items.ProductID LEFT JOIN orders ON orders.OrderID = A.OrderID WHERE A.OrderID IS NOT NULL;