1. Find the total revenue (price × quantity) for each item, sorted from highest to lowest.

db.sales.aggregate([{ $group: { \_id: "$item", totalRevenue: { $sum: { $multiply: ["$price", "$quantity"] } } } }, { $sort: { totalRevenue: -1 } }]);

1. Calculate the total quantity sold per month in 2022.
2. Find all items where price is greater than 10 and size is not 'Short'.

db.sales.find({ price: { $gt: 10 }, size: { $ne: "Short" } });

1. Get all Cappuccino sales with quantity between 10 and 20.

db.sales.find({ item: "Cappuccino", quantity: { $gte: 10, $lte: 20 } });

1. Query to find items where the item name starts with "A".

db.sales.find({ item: { $regex: /^A/ } });

6. Find all records that do not have the field size.

db.sales.find({ size: { $exists: false } });

7. Find all sales that are either "Grande" or "Tall" but not "Americanos".

db.sales.find({ size: { $in: ["Grande", "Tall"] }, item: { $ne: "Americanos" } });

8. List all items sold in February 2022.

db.sales.find({ date: { $gte: ISODate("2022-02-01"), $lt: ISODate("2022-03-01") } });

9. Find sales where the quantity is more than twice the price.

db.sales.find({ $where: "this.quantity > 2 \* this.price" });

10. Find all sales where the price is greater than the average price of their respective size.

11. Find Sales Where the Day of Week Matches Quantity's Last Digit [Filter sales where the day of the week (0=Sunday, 1=Monday, etc.) matches the last digit of quantity]

db.sales.find({ $where: "this.date.getDay() === this.quantity % 10" });

12. Find Sales Where the Month is Prime and Quantity is Odd [Filter sales where the month (1-12) is a prime number (2,3,5,7,11) AND quantity is odd]

db.sales.find({$where:function(){

var getmonth=this.date.getMonth()+1;

var quantity=(this.quantity)%2==1;

var mo=[2,3,5,7,9,11].includes(getmonth);

return mo&&quantity;}})

13. Find Sales with "Suspicious Quantities" (Divisible by 5 or 7) [Filter sales where quantity is divisible by 5 or 7]

db.sales.find({$or:[{quantity:{$mod:[5,0]},quantity:{$mod:[7,0]}}]})