

## MONGO DB TEST

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

```
>_ mongosh: D... x +
>_MONGOSH
> db.sales.aggregate([{$group:{_id:"$item",totalrevenue:{$sum:{$multiply:["$price","$quantity"]}}}],{$sort:{totalrevenue:-1}}])
```

2. Calculate the total quantity sold per month in 2022.

Need to be done

3. Find all items where price is greater than 10 and size is not 'Short'.

```
> db.sales.find({price:{$gt:10},size:{$nin:["Short"]}})
```

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

```
>_ mongosh: Dhanush +
>_MONGOSH
> db.sales.find({item:"Cappuccino",price:{$gte:10,$lte:20}})
```

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

```
> db.sales.find({item:{$regex:/^a/i}})
```

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

```
>_ mongosh: Dhanush +
>_MONGOSH
> db.sales.find({size:{$exists:false}})
```

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

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

8. List all items sold in February 2022

```
> db.sales.find({date:{$gt:ISODate("2022-01-31"),$lt:ISODate("2022-03-01")}})
```

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

> \_MONGOSH

```
> 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.

```
> db.sales.aggregate([{$group: {_id:"$size",avgprice:{$avg:"$price"}}},{ $match:{$expr:{$gt:["$avgprice","$price"]}}}] )
```

11. Find Sales Where the Day of Week Matches Quantity's Last Digit

> \_ mongosh: Dhanush



> \_MONGOSH

```
> 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]

operators

test

vitjune

vitmay

```
> 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;}})
```

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