

## **MONGODB TEST**

**Shatakshi Guha**

**22.3.25**

**1. db.sales.insertMany([**

**{ "\_id" : 1, "item" : "Americanos", "price" : 5, "size": "Short", "quantity" : 22, "date" :  
ISODate("2022-01-15T08:00:00Z") },**

**{ "\_id" : 2, "item" : "Cappuccino", "price" : 6, "size": "Short", "quantity" : 12, "date" :  
ISODate("2022-01-16T09:00:00Z") },**

**{ "\_id" : 3, "item" : "Lattes", "price" : 15, "size": "Grande", "quantity" : 25, "date" :  
ISODate("2022-01-16T09:05:00Z") },**

**{ "\_id" : 4, "item" : "Mochas", "price" : 25, "size": "Tall", "quantity" : 11, "date" :  
ISODate("2022-02-17T08:00:00Z") },**

**{ "\_id" : 5, "item" : "Americanos", "price" : 10, "size": "Grande", "quantity" : 12, "date" :  
ISODate("2022-02-18T21:06:00Z") },**

**{ "\_id" : 6, "item" : "Cappuccino", "price" : 7, "size": "Tall", "quantity" : 20, "date" :  
ISODate("2022-02-20T10:07:00Z") },**

**{ "\_id" : 7, "item" : "Lattes", "price" : 25, "size": "Tall", "quantity" : 30, "date" :  
ISODate("2022-02-21T10:08:00Z") },**

**{ "\_id" : 8, "item" : "Americanos", "price" : 10, "size": "Grande", "quantity" : 21, "date" :  
ISODate("2022-02-22T14:09:00Z") },**

**{ "\_id" : 9, "item" : "Cappuccino", "price" : 10, "size": "Grande", "quantity" : 17, "date" :  
ISODate("2022-02-23T14:09:00Z") },**

**{ "\_id" : 10, "item" : "Americanos", "price" : 8, "size": "Tall", "quantity" : 15, "date" :  
ISODate("2022-02-25T14:09:00Z") }**

**]);**

```

> db.sales.insertMany([
  { "_id" : 1, "item" : "Americanos", "price" : 5, "size": "Short", "quantity" : 22, "date" : ISODate("2022-01-15T08:00:00Z") },
  { "_id" : 2, "item" : "Cappuccino", "price" : 6, "size": "Short", "quantity" : 12, "date" : ISODate("2022-01-16T09:00:00Z") },
  { "_id" : 3, "item" : "Lattes", "price" : 15, "size": "Grande", "quantity" : 25, "date" : ISODate("2022-01-16T09:05:00Z") },
  { "_id" : 4, "item" : "Mochas", "price" : 25, "size": "Tall", "quantity" : 11, "date" : ISODate("2022-02-17T08:00:00Z") },
  { "_id" : 5, "item" : "Americanos", "price" : 10, "size": "Grande", "quantity" : 12, "date" : ISODate("2022-02-18T21:06:00Z") },
  { "_id" : 6, "item" : "Cappuccino", "price" : 7, "size": "Tall", "quantity" : 20, "date" : ISODate("2022-02-20T10:07:00Z") },
  { "_id" : 7, "item" : "Lattes", "price" : 25, "size": "Tall", "quantity" : 30, "date" : ISODate("2022-02-21T10:08:00Z") },
  { "_id" : 8, "item" : "Americanos", "price" : 10, "size": "Grande", "quantity" : 21, "date" : ISODate("2022-02-22T14:09:00Z") },
  { "_id" : 9, "item" : "Cappuccino", "price" : 10, "size": "Grande", "quantity" : 17, "date" : ISODate("2022-02-23T14:09:00Z") },
  { "_id" : 10, "item" : "Americanos", "price" : 8, "size": "Tall", "quantity" : 15, "date" : ISODate("2022-02-25T14:09:00Z")}
]);
< {
  acknowledged: true,
  insertedIds: {
    '0': 1,
    '1': 2,
    '2': 3,
    '3': 4,
    '4': 5,
    '5': 6,
    '6': 7,
    '7': 8,
    '8': 9,
    '9': 10
  }
}
> db.sales.find({ "item": "Mochas" });

```

**2. *db.sales.find({ "item": "Mochas" });***

```
> db.sales.find({ "item": "Mochas" });
< {
  _id: 4,
  item: 'Mochas',
  price: 25,
  size: 'Tall',
  quantity: 11,
  date: 2022-02-17T08:00:00.000Z
}
> db.sales.find({ "$or": [ { "price": { "$lt": 10 } }, { "price": { "$gt": 20 } } ] });
< {
  _id: 1,
  item: 'Americanos',
  price: 5,
  size: 'Short',
  quantity: 22,
  date: 2022-01-15T08:00:00.000Z
}
{
  _id: 2,
  item: 'Cappuccino',
  price: 6,
  size: 'Short',
  quantity: 12,
  date: 2022-01-16T09:00:00.000Z
}
```

```

    _id: 4,
    item: 'Mochas',
    price: 25,
    size: 'Tall',
    quantity: 11,
    date: 2022-02-17T08:00:00.000Z
  }
  {
    _id: 6,
    item: 'Cappuccino',
    price: 7,
    size: 'Tall',
    quantity: 20,
    date: 2022-02-20T10:07:00.000Z
  }
  {
    _id: 7,
    item: 'Lattes',
    price: 25,
    size: 'Tall',
    quantity: 30,
    date: 2022-02-21T10:08:00.000Z
  }
  {
    _id: 10,
    item: 'Americanos',
    price: 8,
    size: 'Tall',

```

3. *db.sales.find({ "\$or": [ { "price": { "\$lt": 10 } }, { "price": { "\$gt": 20 } } ] });*

```

    size: 'Tall',
    quantity: 30,
    date: 2022-02-21T10:08:00.000Z
  }
  {
    _id: 10,
    item: 'Americanos',
    price: 8,
    size: 'Tall',
    quantity: 15,
    date: 2022-02-25T14:09:00.000Z
  }
> db.sales.find({ "color": "white" });
<
> db.sales.find({ "color": "white" });
<
> db.users.updateOne(
  { "name": "xTablet" },
  { "$set": { "ram": 24 } }
);
< {
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
> db.products.find({}, { "spec": 1, "_id": 0 });
<
test>

```

4. *db.sales.find({ "color": "white" });*

5. *db.users.updateOne(*  
*{ "name": "xTablet" },*

```
    { "$set": { "ram": 24 } }  
  );
```

```
    size: 'Tall',  
    quantity: 30,  
    date: 2022-02-21T10:08:00.000Z  
  }  
{  
  _id: 10,  
  item: 'Americanos',  
  price: 8,  
  size: 'Tall',  
  quantity: 15,  
  date: 2022-02-25T14:09:00.000Z  
}  
> db.sales.find({ "color": "white" });  
<  
> db.sales.find({ "color": "white" });  
<  
> db.users.updateOne(  
  { "name": "xTablet" },  
  { "$set": { "ram": 24 } }  
)  
< {  
  acknowledged: true,  
  insertedId: null,  
  matchedCount: 0,  
  modifiedCount: 0,  
  upsertedCount: 0  
}  
> db.products.find({}, { "spec": 1, "_id": 0 });  
<  
test>
```

6. *db.products.find({}, { "spec": 1, "\_id": 0 });*

7. `db.products.find().sort({ "price": -1 });`

8. `db.products.find().skip(1).limit(2);`

9. `db.users.find({  
 "name": { "$regex": "^S", "$options": "i" },  
 "price": { "$gt": 700 }  
});`

10. `db.sales.aggregate([  
 {  
 "$group": {  
 "_id": null,  
 "totalPrice": { "$sum": "$price" }  
 }  
 }  
]);`

```
> db.sales.aggregate([  
  {  
    "$group": {  
      "_id": null,  
      "totalPrice": { "$sum": "$price" }  
    }  
  }  
]);  
< {  
  _id: null,  
  totalPrice: 121  
}
```

**11. *db.sales.find({}, { "size": 1, "\_id": 0 });***



```
{
  size: 'Short'
}
{
  size: 'Grande'
}
{
  size: 'Tall'
}
{
  size: 'Grande'
}
{
  size: 'Tall'
}
{
  size: 'Tall'
}
{
  size: 'Grande'
}
{
  size: 'Grande'
}
{
  size: 'Tall'
}
```

test>



Search



```

> db.sales.aggregate([
  {
    "$group": {
      "_id": null,
      "totalPrice": { "$sum": "$price"
    }
  }
]);
< {
  _id: null,
  totalPrice: 121
}
> db.sales.find({}, { "size": 1, "_id": 0 });
< {
  size: 'Short'
}
{
  size: 'Short'
}
{
  size: 'Grande'
}

```

```

12. db.sales.aggregate([
  { "$match": { "size": "Tall" } },
  { "$group": { "_id": "$item", "count": { "$sum": 1 } } }
]);

```

```

> db.sales.aggregate([
  { "$match": { "size": "Tall" } },
  { "$group": { "_id": "$item", "count": { "$sum": 1 } } }
]);
< {
  _id: 'Lattes',
  count: 1
}
{
  _id: 'Americanos',
  count: 1
}
{
  _id: 'Mochas',
  count: 1
}
{
  _id: 'Cappuccino',
  count: 1
}
}
test>

```

**13. `db.sales.find().sort({ "price": 1 }).skip(1).limit(1);`**

```

> db.sales.find().sort({ "price": 1 }).skip(1).limit(1);
< {
  _id: 2,
  item: 'Cappuccino',
  price: 6,
  size: 'Short',
  quantity: 12,
  date: 2022-01-16T09:00:00.000Z
}

```

```
14. db.sales.aggregate([  
  {  
    "$group": {  
      "_id": "$item",  
      "totalQuantity": { "$sum": "$quantity" },  
      "averagePrice": { "$avg": "$price" }  
    }  
  }  
]);
```

```
> db.sales.aggregate([
  {
    "$group": {
      "_id": "$item",
      "totalQuantity": { "$sum": "$quantity" },
      "averagePrice": { "$avg": "$price" }
    }
  }
]);
< {
  _id: 'Cappuccino',
  totalQuantity: 49,
  averagePrice: 7.666666666666667
}
{
  _id: 'Lattes',
  totalQuantity: 55,
  averagePrice: 20
}
{
  _id: 'Mochas',
  totalQuantity: 11,
  averagePrice: 25
}
{
  _id: 'Americanos',
  totalQuantity: 70,
  averagePrice: 8.25
}
```