

Prolog

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NoSQL – MongoDB

The screenshot shows the Visual Studio Code interface with a MongoDB playground script in the center editor and its output in the bottom panel.

Explorer: The Explorer sidebar on the left shows the file structure. It includes a group for 'playground-1.mongodb.js' and a group for 'NOSQL - MONGODB' containing 'Playground Result.txt' and 'playground-1.mongodb.js'.

Editor: The main editor displays the JavaScript file 'playground-1.mongodb.js'. The script is as follows:

```
1 // Select the database to use.
2 use('mongodbVSCodePlaygroundDB');
3
4 // Insert a few documents into the sales collection.
5 db.getCollection('sales').insertMany([
6   { 'item': 'abc', 'price': 10, 'quantity': 2, 'date': new Date('2014-03-01T08:00:00Z') },
7   { 'item': 'jkl', 'price': 20, 'quantity': 1, 'date': new Date('2014-03-01T09:00:00Z') },
8   { 'item': 'xyz', 'price': 5, 'quantity': 10, 'date': new Date('2014-03-15T09:00:00Z') },
9   { 'item': 'xyz', 'price': 5, 'quantity': 20, 'date': new Date('2014-04-04T11:00:00Z') },
10  { 'item': 'abc', 'price': 10, 'quantity': 10, 'date': new Date('2014-04-04T12:00:00Z') },
11  { 'item': 'def', 'price': 7.5, 'quantity': 5, 'date': new Date('2015-06-04T05:00:00Z') },
12  { 'item': 'def', 'price': 7.5, 'quantity': 10, 'date': new Date('2015-09-10T05:00:00Z') },
13  { 'item': 'abc', 'price': 10, 'quantity': 5, 'date': new Date('2016-02-06T20:00:00Z') }
14 ]);
15
16 // Print a message to the output window.
17 console.log('This is the name of database: ' + db.getName());
18
19 // Run a find command to view items sold on April 4th, 2014.
20 const salesOnApril4th = db.getCollection('sales').find({
21   date: { $gte: new Date('2014-04-04'), $lt: new Date('2014-04-05') }
22 }).count();
23
24 // Print a message to the output window.
25 console.log(`${salesOnApril4th} sales occurred in 2014.`);
26
```

Output: The bottom panel shows the output of the script. It contains two lines of text:

```
This is the name of database: mongodbVSCodePlaygroundDB
56 sales occurred in 2014.
```

Playground Result.txt: A separate editor window on the right shows the result of the script execution, which is a JSON array of documents:

```
[
  {
    "_id": "jkl",
    "totalSaleAmount": 560
  },
  {
    "_id": "xyz",
    "totalSaleAmount": 4200
  },
  {
    "_id": "abc",
    "totalSaleAmount": 3360
  }
]
```