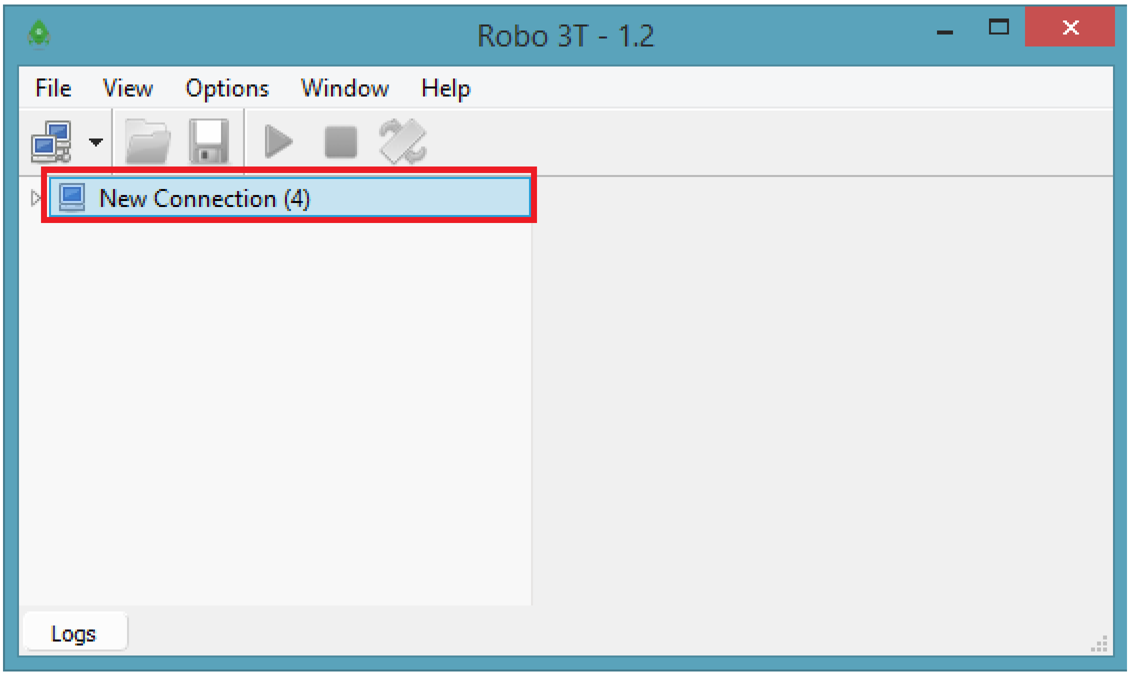
MongoDB

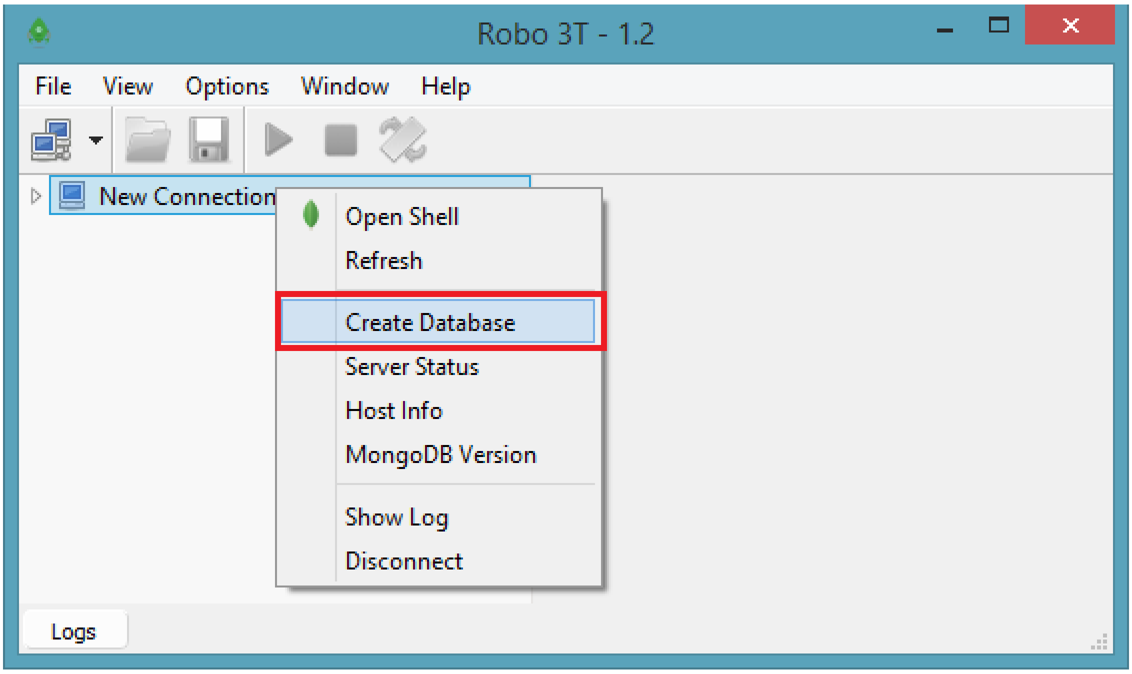
<u>Steps to create MongoDB database:</u>

The Robo 3T tool is used to setup MongoDB, download Robo 3T from https://robomongo.org/.

i] Right click on New Connection



ii] Click on Create Database



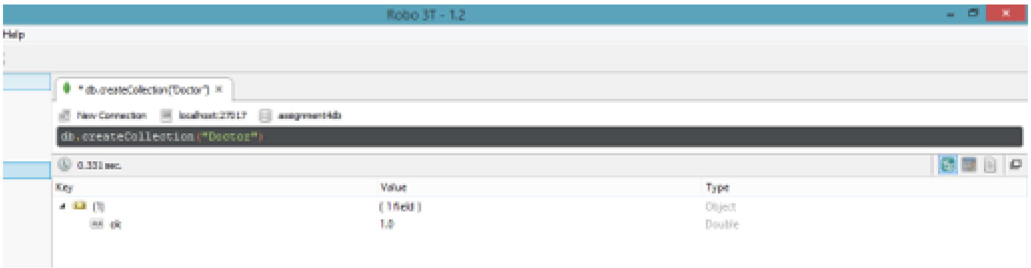
iii] Enter the Database Name MongoDB and click on Create iv] Finally database MongoDB is created.

Collection create code and screenshot:

Code:

db.createCollection("Doctor ")

Screenshot:



```
db.createCollection("Doctor")
```

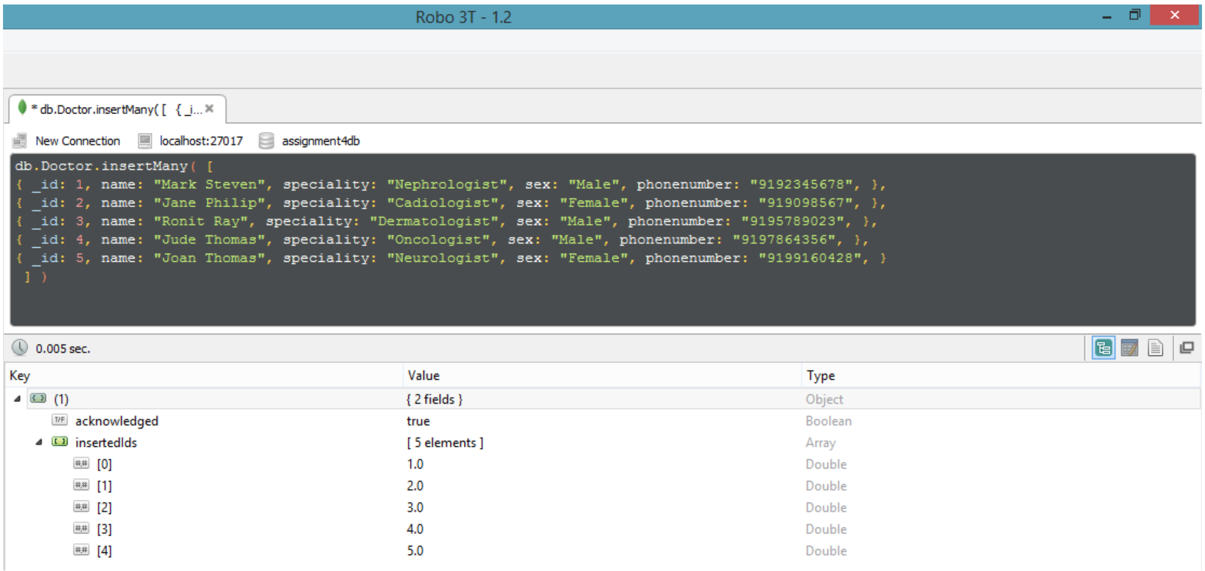
```
0.331 sec.
Key                      Value              Type
(1)                      { 1 field }        Object
    ok                   1.0                Double
```

Populate Collection with data:

Code:

```
db.Doctor.insertMany( [
{ _id: 1, name: "Mark Steven", speciality: "Nephrologist", sex: "Male", phonenumber:
"9192345678",
},
{ _id: 2, name: "Jane Philip", speciality: "Cadiologist", sex: "Female", phonenumber:
"919098567", },
{ _id: 3, name: "Ronit Ray", speciality: "Dermatologist", sex: "Male", phonenumber:
"9195789023", },
{ _id: 4, name: "Jude Thomas", speciality: "Oncologist", sex: "Male", phonenumber:
"9197864356",},
{ _id: 5, name: "Joan Thomas", speciality: "Neurologist", sex: "Female",
phonenumber: "9199160428", }
 ] )
```

Screenshot:



```
db.Doctor.insertMany( [
{ _id: 1, name: "Mark Steven", speciality: "Nephrologist", sex: "Male", phonenumber: "9192345678", },
{ _id: 2, name: "Jane Philip", speciality: "Cadiologist", sex: "Female", phonenumber: "919098567", },
{ _id: 3, name: "Ronit Ray", speciality: "Dermatologist", sex: "Male", phonenumber: "9195789023", },
{ _id: 4, name: "Jude Thomas", speciality: "Oncologist", sex: "Male", phonenumber: "9197864356", },
{ _id: 5, name: "Joan Thomas", speciality: "Neurologist", sex: "Female", phonenumber: "9199160428", }
 ] )
```

0.005 sec.

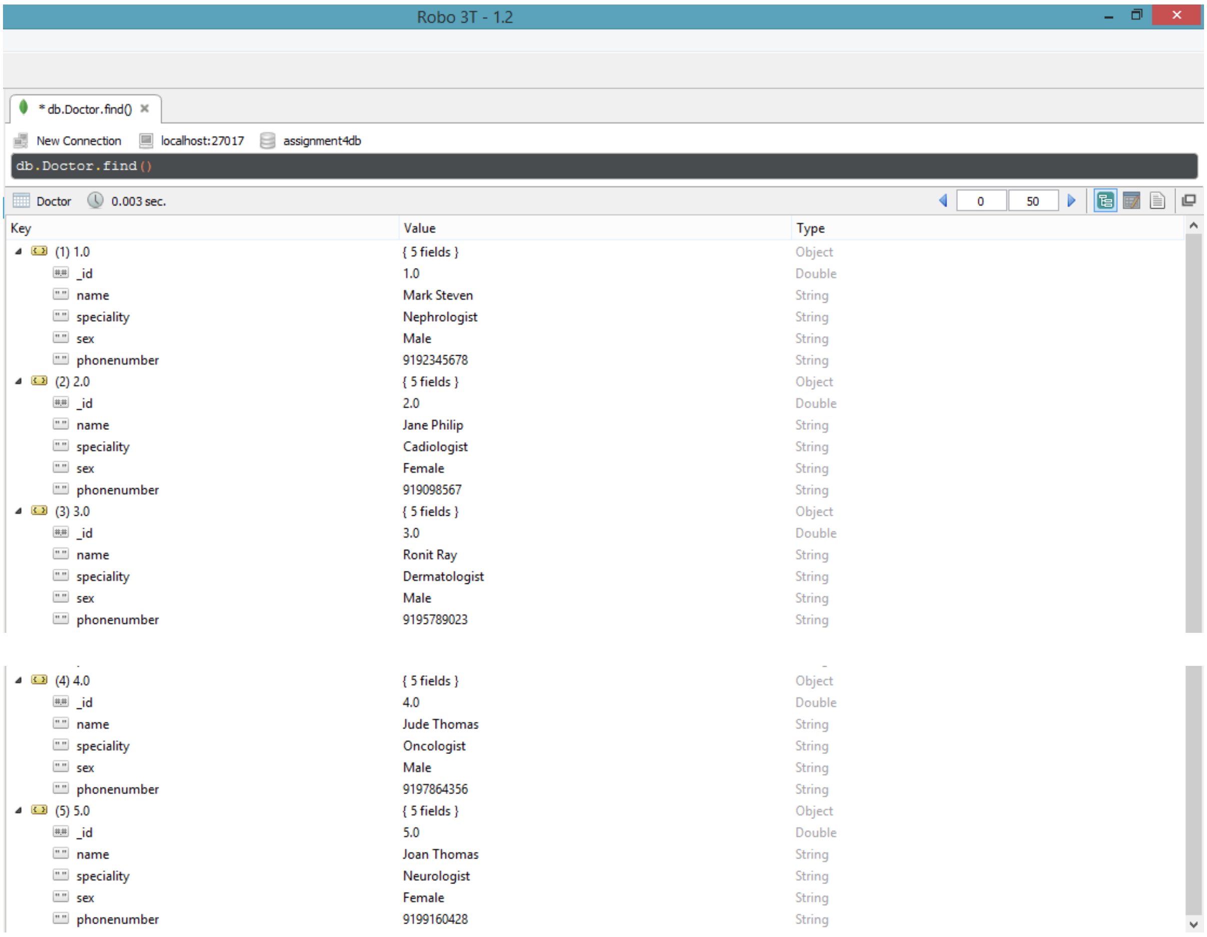
Key	Value	Type
(1)	{ 2 fields }	Object
acknowledged	true	Boolean
insertedIds	[5 elements]	Array
[0]	1.0	Double
[1]	2.0	Double
[2]	3.0	Double
[3]	4.0	Double
[4]	5.0	Double

Queries

1]

db.Doctor.find()

Screenshot:



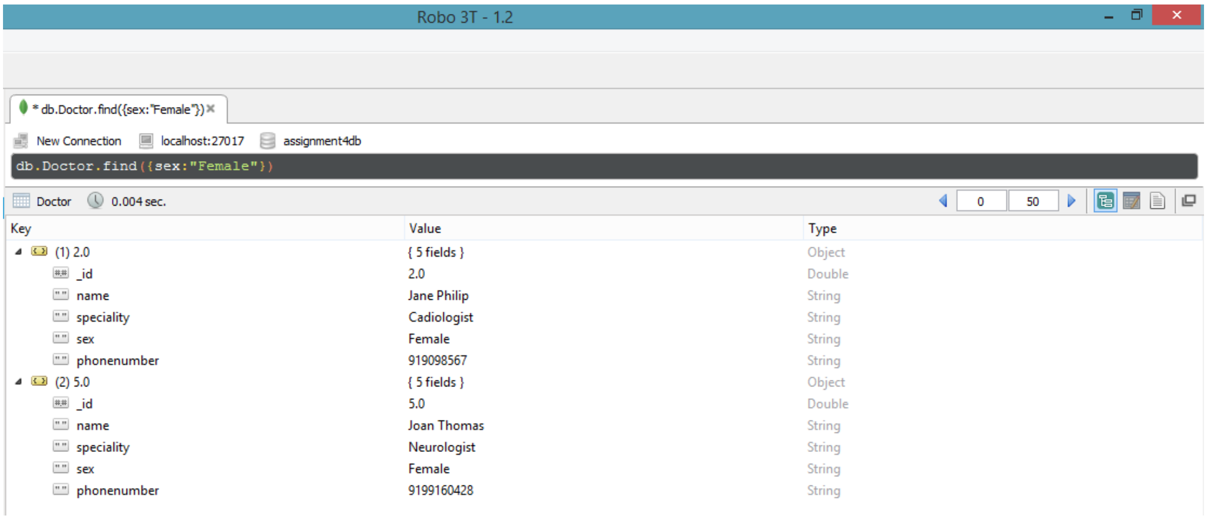
```
db.Doctor.find()
```

Key	Value	Type
(1) 1.0	{ 5 fields }	Object
_id	1.0	Double
name	Mark Steven	String
speciality	Nephrologist	String
sex	Male	String
phonenumber	9192345678	String
(2) 2.0	{ 5 fields }	Object
_id	2.0	Double
name	Jane Philip	String
speciality	Cadiologist	String
sex	Female	String
phonenumber	919098567	String
(3) 3.0	{ 5 fields }	Object
_id	3.0	Double
name	Ronit Ray	String
speciality	Dermatologist	String
sex	Male	String
phonenumber	9195789023	String
(4) 4.0	{ 5 fields }	Object
_id	4.0	Double
name	Jude Thomas	String
speciality	Oncologist	String
sex	Male	String
phonenumber	9197864356	String
(5) 5.0	{ 5 fields }	Object
_id	5.0	Double
name	Joan Thomas	String
speciality	Neurologist	String
sex	Female	String
phonenumber	9199160428	String

2]

db.Doctor.find({sex:"Female"}

) Screenshot:



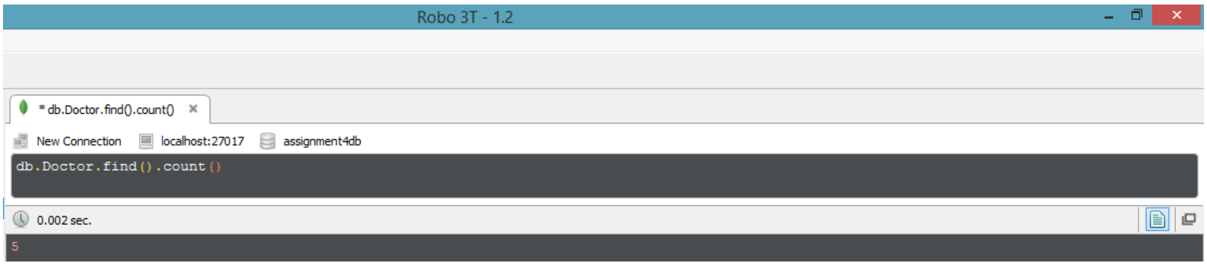
```
db.Doctor.find({sex:"Female"})
```

Key	Value	Type
(1) 2.0	{ 5 fields }	Object
_id	2.0	Double
name	Jane Philip	String
speciality	Cadiologist	String
sex	Female	String
phonenumber	919098567	String
(2) 5.0	{ 5 fields }	Object
_id	5.0	Double
name	Joan Thomas	String
speciality	Neurologist	String
sex	Female	String
phonenumber	9199160428	String

3]

db.Doctor.find().count()

Screenshot:



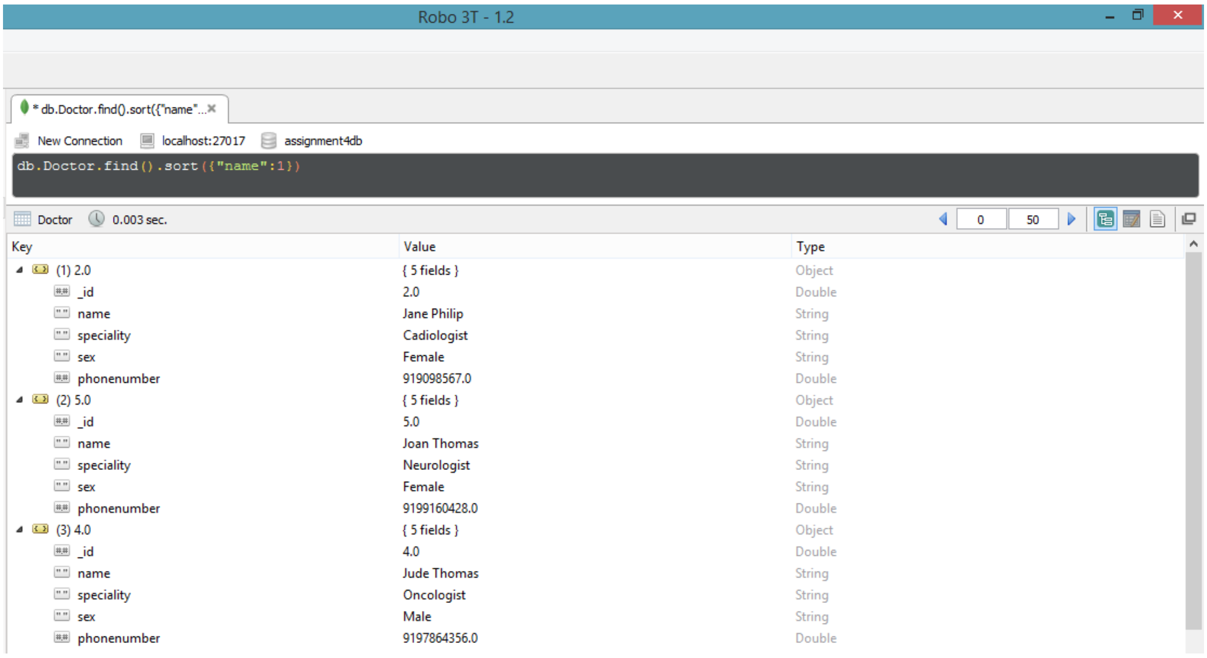
```
db.Doctor.find().count()
```

```
5
```

4]

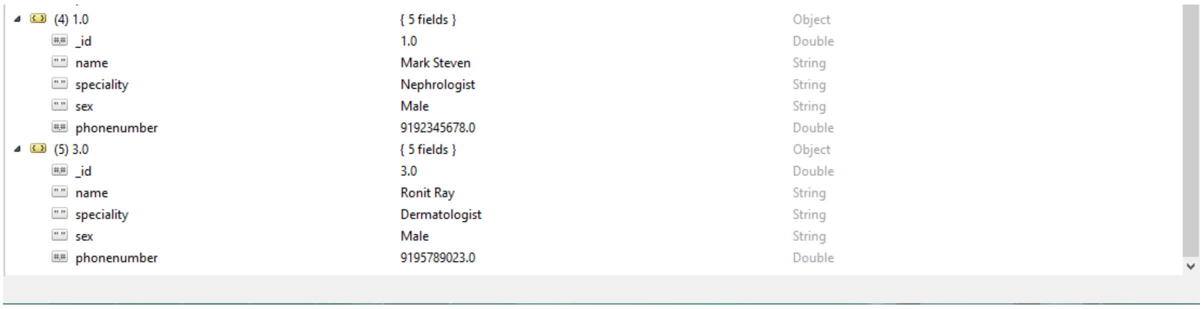
db.Doctor.find().sort({"name":1}

) Screenshot:



```
db.Doctor.find().sort({"name":1})
```

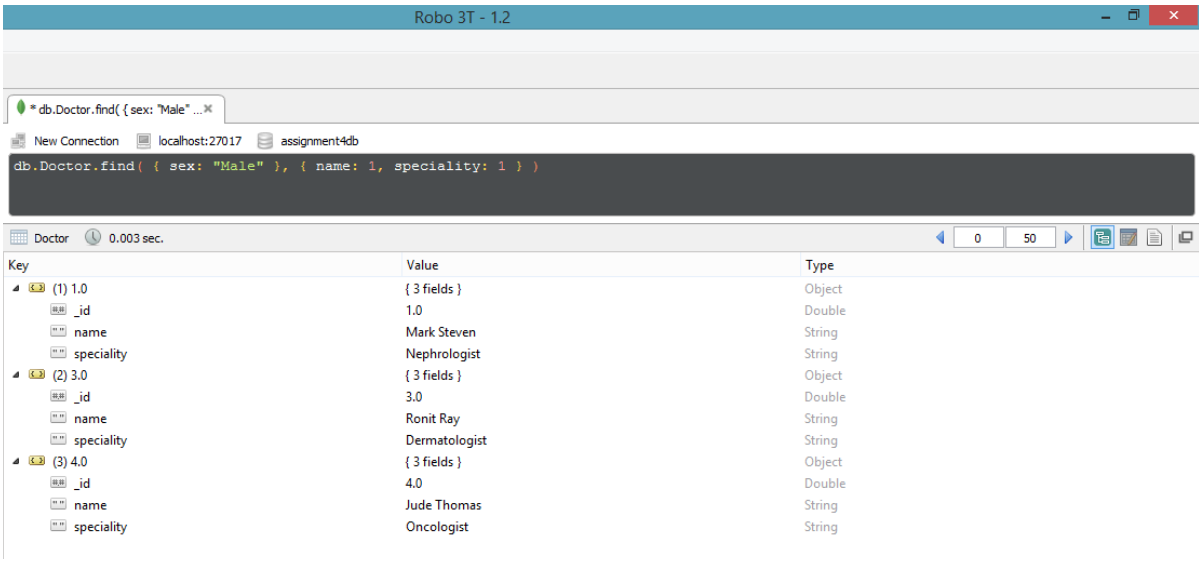
Key	Value	Type
(1) 2.0	{ 5 fields }	Object
_id	2.0	Double
name	Jane Philip	String
speciality	Cadiologist	String
sex	Female	String
phonenumber	919098567.0	Double
(2) 5.0	{ 5 fields }	Object
_id	5.0	Double
name	Joan Thomas	String
speciality	Neurologist	String
sex	Female	String
phonenumber	9199160428.0	Double
(3) 4.0	{ 5 fields }	Object
_id	4.0	Double
name	Jude Thomas	String
speciality	Oncologist	String
sex	Male	String
phonenumber	9197864356.0	Double



```
(4) 1.0              { 5 fields }     Object
    _id              1.0              Double
    name             Mark Steven      String
    speciality       Nephrologist     String
    sex              Male             String
    phonenumber      9192345678.0     Double
(5) 3.0              { 5 fields }     Object
    _id              3.0              Double
    name             Ronit Ray        String
    speciality       Dermatologist    String
    sex              Male             String
    phonenumber      9195789023.0     Double
```

5] db.Doctor.find({ sex: "Male" }, { name: 1,

speciality: 1 }) Screenshot:

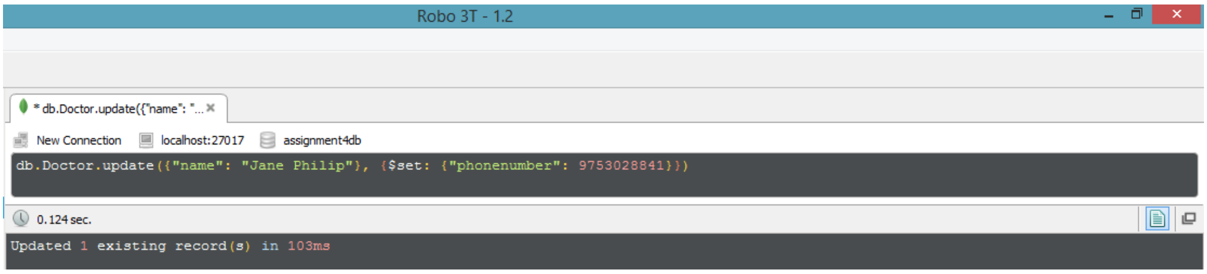


```
db.Doctor.find( { sex: "Male" }, { name: 1, speciality: 1 } )
```

```
Key                  Value            Type
(1) 1.0              { 3 fields }     Object
    _id              1.0              Double
    name             Mark Steven      String
    speciality       Nephrologist     String
(2) 3.0              { 3 fields }     Object
    _id              3.0              Double
    name             Ronit Ray        String
    speciality       Dermatologist    String
(3) 4.0              { 3 fields }     Object
    _id              4.0              Double
    name             Jude Thomas      String
    speciality       Oncologist       String
```

6] db.Doctor.update({"name": "Jane Philip"}, {$set: {"phonenumber":

9753028841}}) Screenshot:

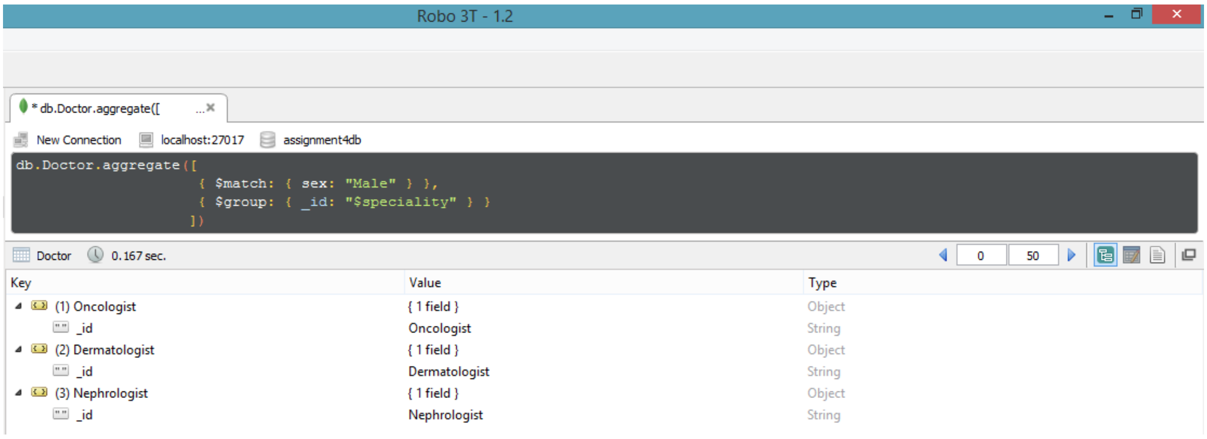


```
db.Doctor.update({"name": "Jane Philip"}, {$set: {"phonenumber": 9753028841}})
```

```
Updated 1 existing record(s) in 103ms
```

7] db.Doctor.aggregate([
{ $match: { sex: "Male" } },
{ $group: { _id: "$speciality" } }
])

Screenshot:

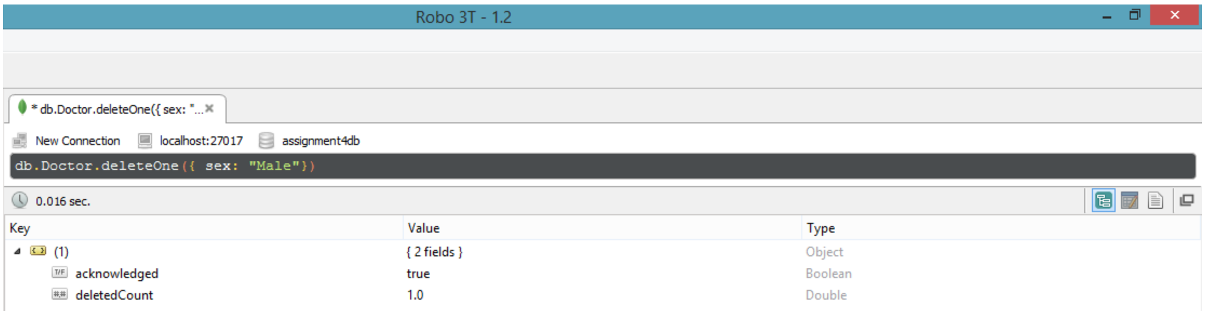


```
db.Doctor.aggregate([
                      { $match: { sex: "Male" } },
                      { $group: { _id: "$speciality" } }
                     ])
```

```
Key                              Value              Type
◢ (1) Oncologist                 { 1 field }        Object
     _id                         Oncologist         String
◢ (2) Dermatologist              { 1 field }        Object
     _id                         Dermatologist      String
◢ (3) Nephrologist               { 1 field }        Object
     _id                         Nephrologist       String
```

8] db.Doctor.deleteOne({ sex:

"Male"}) Screenshot:

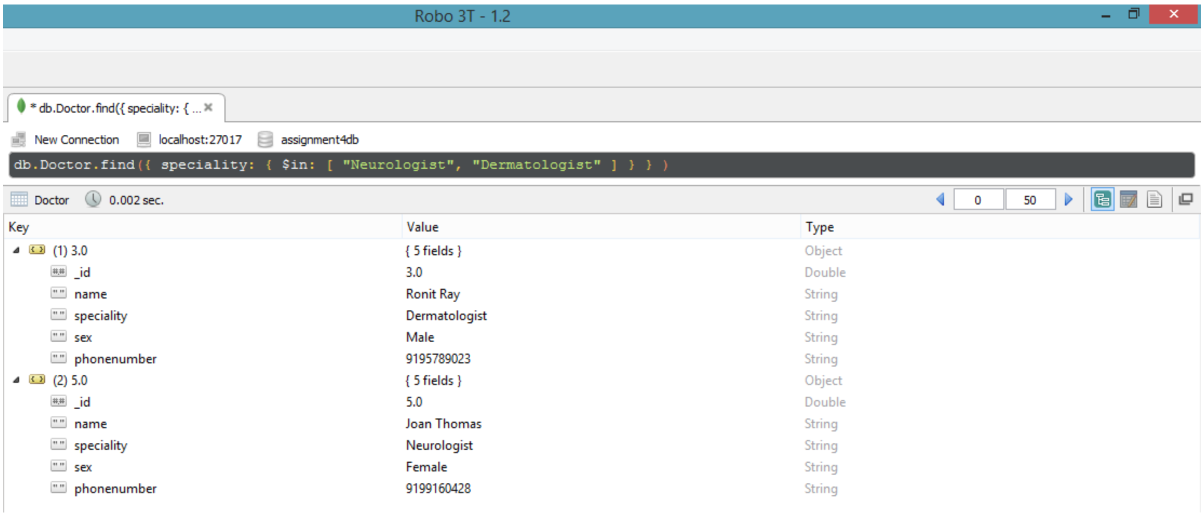


```
db.Doctor.deleteOne({ sex: "Male"})
```

```
Key                              Value              Type
◢ (1)                            { 2 fields }       Object
     acknowledged                true               Boolean
     deletedCount                1.0                Double
```

9] db.Doctor.find({ speciality: { $in: ["Neurologist",

"Dermatologist"] } }) Screenshot:

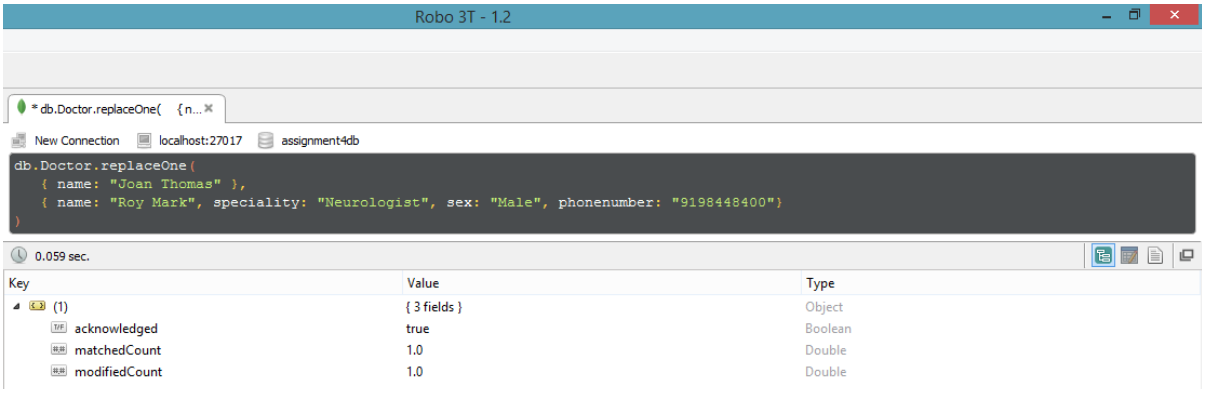


```
db.Doctor.find({ speciality: { $in: [ "Neurologist", "Dermatologist" ] } } )
```

```
Key                              Value              Type
◢ (1) 3.0                        { 5 fields }       Object
     _id                         3.0                Double
     name                        Ronit Ray          String
     speciality                  Dermatologist      String
     sex                         Male               String
     phonenumber                 9195789023         String
◢ (2) 5.0                        { 5 fields }       Object
     _id                         5.0                Double
     name                        Joan Thomas        String
     speciality                  Neurologist        String
     sex                         Female             String
     phonenumber                 9199160428         String
```

10]
db.Doctor.replaceOne(
 { name: "Joan Thomas" },
   { name: "Roy Mark", speciality: "Neurologist", sex: "Male", phonenumber: "9198448400"}
)

Screenshot:



```
db.Doctor.replaceOne(
   { name: "Joan Thomas" },
   { name: "Roy Mark", speciality: "Neurologist", sex: "Male", phonenumber: "9198448400"}
)
```

0.059 sec.

Key	Value	Type
(1)	{ 3 fields }	Object
acknowledged	true	Boolean
matchedCount	1.0	Double
modifiedCount	1.0	Double