Roll no : Te31413

Assignment 9

Design and develop MongoDB queries using CRUD operations. (Use CRUD operations, SAVE method, logical operators).

1) show databases
2) use ownDB

```
test> show databases;
admin    40.00 KiB
config   72.00 KiB
local    72.00 KiB
myDB     72.00 KiB
test> use ownDB
switched to db ownDB
ownDB> show databases;
```

3) ownDB> db.createCollection("MyCollection")
4)ownDB> db.MyCollection.insert({name:"Siddhi",age:20})

```
ownDB> db.createCollection("MyCollection")
{ ok: 1 }
ownDB> db.MyCollection.insert({name:"Siddhi",age:20})
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany
, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId('66ee3e75c5235aa1a9964033') }
}
```

5) ownDB> db.MyCollection.find({})

```
}
ownDB> db.MyCollection.find({})
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 20
  }
]
ownDB>
```

6) ownDB> db.MyCollection.insertMany([{name:"Anushree",age:20},
{name:"Dhanashree",age:22},{name:"Shreeja",age:20}])

```
ownDB> db.MyCollection.insertMany([{name:"Anushree",age:20},{name:"Dhanashree",age:22},{name:
"Shreeja",age:20}])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('66ee4486cd7bc7ece3964034'),
    '1': ObjectId('66ee4486cd7bc7ece3964035'),
    '2': ObjectId('66ee4486cd7bc7ece3964036')
  }
}
ownDB> db.MyCollection.find()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 20
  },
  {
    _id: ObjectId('66ee43facd7bc7ece3964033'),
    name: 'Savani',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 20
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964035'),
    name: 'Dhanashree',
    age: 22
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964036'),
    name: 'Shreeja',
    age: 20
```

7) db.MyCollection.find({age:{$gt:20}})

```
]
ownDB> db.MyCollection.find({age:{$gt:20}})
[
  {
    _id: ObjectId('66ee43facd7bc7ece3964033'),
    name: 'Savani',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964035'),
    name: 'Dhanashree',
    age: 22
  }
]
ownDB>
```

8) db.MyCollection.updateOne({name:"Shreeja"},{$set:{age:21}})

```
ownDB> db.MyCollection.updateOne({name:"Shreeja"},{$set:{age:21}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
ownDB>
```

9) db.MyCollection.updateMany({},{$inc:{age:1}})

```
ownDB> db.MyCollection.updateMany({},{$inc:{age:1}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 5,
  modifiedCount: 5,
  upsertedCount: 0
}
ownDB> db.MyCollection.find().pretty()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee43facd7bc7ece3964033'),
    name: 'Savani',
    age: 22
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964035'),
    name: 'Dhanashree',
    age: 23
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964036'),
    name: 'Shreeja',
    age: 22
  }
]
ownDB>
```

10) db.MyCollection.deleteOne({name:"Dhanashree"})

```
]
ownDB> db.MyCollection.deleteOne({name:"Dhanashree"})
{ acknowledged: true, deletedCount: 1 }
ownDB>
```

11) ownDB> db.MyCollection.deleteMany({age:{$gt:21}})

```
ownDB> db.MyCollection.deleteMany({age:{$gt:21}})
{ acknowledged: true, deletedCount: 2 }
ownDB> db.MyCollection.find().pretty()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  }
]
ownDB>
```

Logical Operators :

12) db.MyCollection.find({$and:[{name:"Sakshi"},{age:20}]}).pretty()

```
]
ownDB> db.MyCollection.find({$and:[{name:"Sakshi"},{age:20}]}).pretty()
[
  {
    _id: ObjectId('66ee4823cd7bc7ece3964037'),
    name: 'Sakshi',
    age: 20
  }
]
ownDB>
```

13) db.MyCollection.find({$or:[{name:"Sakshi"},{age:21},{name:"Rajshree"}]}).pretty()

```
]
ownDB> db.MyCollection.find({$or:[{name:"Sakshi"},{age:21},{name:"Rajshree"}]}).pretty
()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964037'),
    name: 'Sakshi',
    age: 20
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece396403a'),
    name: 'Rajshree',
    age: 26
  }
]
ownDB>
```

14) db.MyCollection.find({age:{$not:{$gt:22}}}).pretty()

```
]
ownDB> db.MyCollection.find({age:{$not:{$gt:22}}}).pretty()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964037'),
    name: 'Sakshi',
    age: 20
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964038'),
    name: 'Dhanashree',
    age: 22
  }
]
ownDB>
```

Comparison Query
15) db.MyCollection.find({age:{$gte:21}}).pretty()

```
ownDB> db.MyCollection.find({age:{$gte:21}}).pretty()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964038'),
    name: 'Dhanashree',
    age: 22
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964039'),
    name: 'Shreeja',
    age: 24
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece396403a'),
    name: 'Rajshree',
    age: 26
  }
]
ownDB>
```

16) db.MyCollection.find({age:{$lte:22}}).pretty()

```
ownDB> db.MyCollection.find({age:{$lte:22}}).pretty()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964037'),
    name: 'Sakshi',
    age: 20
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964038'),
    name: 'Dhanashree',
    age: 22
  }
]
ownDB>
```

17) db.MyCollection.find({name:{$in:["Siddhi","Sakshi","Anushree"]}}).pretty()

```
ownDB> db.MyCollection.find({name:{$in:["Siddhi","Sakshi","Anushree"]}}).pretty()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964037'),
    name: 'Sakshi',
    age: 20
  }
]
ownDB>
```

18) db.MyCollection.find({name:{$nin:["Siddhi","Sakshi","Anushree"]}}).pretty()

```
ownDB> db.MyCollection.find({name:{$nin:["Siddhi","Sakshi","Anushree"]}}).pretty()
[
  {
    _id: ObjectId('66ee4823cd7bc7ece3964038'),
    name: 'Dhanashree',
    age: 22
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964039'),
    name: 'Shreeja',
    age: 24
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece396403a'),
    name: 'Rajshree',
    age: 26
  }
]
ownDB>
```

Regex:
19)db.MyCollection.find({ name: { $regex: /s/ } }).pretty()

```
wnDB> db.MyCollection.find({ name: { $regex: /s/ } }).pretty()
[
  {
    _id: ObjectId('66ee4486cd7bc7ece3964034'),
    name: 'Anushree',
    age: 21
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964037'),
    name: 'Sakshi',
    age: 20
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964038'),
    name: 'Dhanashree',
    age: 22
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece396403a'),
    name: 'Rajshree',
    age: 26
  }
]
```

20) db.MyCollection.find({ name: { $regex: /^S/ } }).pretty()

```
wnDB> db.MyCollection.find({ name: { $regex: /^S/ } }).pretty()
[
  {
    _id: ObjectId('66ee3e75c5235aa1a9964033'),
    name: 'Siddhi',
    age: 21
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964037'),
    name: 'Sakshi',
    age: 20
  },
  {
    _id: ObjectId('66ee4823cd7bc7ece3964039'),
    name: 'Shreeja',
    age: 24
  }
]
wnDB>
```