

Q. Design and develop MongoDB queries using CRUD operations.

```
bash-4.2$ cd mongodb-linux-x86_64-3.0.4
bash-4.2$ cd bin
bash-4.2$ ./mongo 10.10.13.151/t31255db -u t31255 -p t31255
MongoDB shell version: 3.0.4
connecting to: 10.10.13.151/t31255db
> db.createCollection('Football Players');
{ "ok" : 1 }
> db.Football Players.find();
2019-09-10T10:44:51.978+0530 E QUERY   SyntaxError: Unexpected identifier
> db.FootballPlayers.find();
> db.FootballPlayers.drop();
false
> db.Football Players.drop();
2019-09-10T10:45:31.457+0530 E QUERY   SyntaxError: Unexpected identifier
> db.Football.drop();
false
```

Q1. Create a collection.

```
> db.createCollection('FootballPlayers');
{ "ok" : 1 }
> db.FootballPlayers.insert({fname: 'Cristiano', lname: 'Ronaldo', age:34, teams: ['Juventus',
'Portugal'], position: 'ST', rating: 93});
WriteResult({ "nInserted" : 1 })
> db.FootballPlayers.find().pretty();
{
  "_id" : ObjectId("5d77325dcf5de44f995e742a"),
  "fname" : "Cristiano",
  "lname" : "Ronaldo",
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",
  "rating" : 93
}
> db.FootballPlayers.remove();
2019-09-10T10:50:48.650+0530 E QUERY   Error: remove needs a query
    at Error (<anonymous>)
    at DBCollection._parseRemove (src/mongo/shell/collection.js:305:32)
    at DBCollection.remove (src/mongo/shell/collection.js:328:23)
    at (shell):1:20 at src/mongo/shell/collection.js:305
2019-09-10T10:50:48.650+0530 I NETWORK   DBClientCursor::init call() failed
> db.FootballPlayers.remove({age:34});
2019-09-10T10:50:57.699+0530 I NETWORK   trying reconnect to 10.10.13.151:27017 (10.10.13.151)
failed
2019-09-10T10:50:57.700+0530 I NETWORK   reconnect 10.10.13.151:27017 (10.10.13.151) ok
```

```

WriteResult({ "nRemoved" : 1 })
> db.FootballPlayers.insert({name:{fname:}, age:34, teams: ['Juventus', 'Portugal'], position: 'ST',
rating: 93});
2019-09-10T10:52:56.480+0530 E QUERY SyntaxError: Unexpected token }
> db.FootballPlayers.insert({name:{fname:'Cristiano',lname:'Ronaldo'}, age:34, teams: ['Juventus',
'Portugal'], position: 'ST', rating: 93});
2019-09-10T10:53:23.856+0530 I NETWORK DBClientCursor::init call() failed
2019-09-10T10:53:23.856+0530 E QUERY Error: Error: error doing query: failed
    at Error (<anonymous>)
    at DBCollection.insert (src/mongo/shell/collection.js:260:23)
    at (shell):1:20 at src/mongo/shell/collection.js:260
> db.FootballPlayers.insert({name:{fname:['Cristiano',lname:'Ronaldo']}, age:34, teams: ['Juventus',
'Portugal'], position: 'ST', rating: 93});
2019-09-10T10:55:44.823+0530 E QUERY SyntaxError: Unexpected token :
> db.FootballPlayers.insert({name:[{fname:'Cristiano',lname:'Ronaldo'}], age:34, teams:
['Juventus', 'Portugal'], position: 'ST', rating: 93});
2019-09-10T10:56:14.856+0530 I NETWORK trying reconnect to 10.10.13.151:27017 (10.10.13.151)
failed
2019-09-10T10:56:14.857+0530 I NETWORK reconnect 10.10.13.151:27017 (10.10.13.151) ok
WriteResult({ "nInserted" : 1 })

```

Q2. Remove entry of player aged 34.

```
> db.FootballPlayers.remove({age:34});
```

```
WriteResult({ "nRemoved" : 1 })
```

Q3. Insert 10 entries in the collection.

```
> db.FootballPlayers.insert({name:[{fname:'Cristiano',lname:'Ronaldo'}], age:34, teams: ['Juventus',
'Portugal'], position: 'ST', rating: 93});
```

```
WriteResult({ "nInserted" : 1 })
```

```
> db.FootballPlayers.insert({name:[{fname:'Lionel',lname:'Messi'}], age:32, teams: ['FCBarcelona',
'Argentina'], position: 'RW', rating: 94});
```

```
WriteResult({ "nInserted" : 1 })
```

```
> db.FootballPlayers.insert({name:[{fname:'Neymar',lname:'Jr'}], age:27, teams: ['PSG', 'Brazil'],
position: 'LW', rating: 92});
```

```
WriteResult({ "nInserted" : 1 })
```

```
> db.FootballPlayers.find().pretty();
```

```

{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",

```

```

        "rating" : 93
    }
    {
        "_id" : ObjectId("5d7734dccf5de44f995e742e"),
        "name" : [
            {
                "fname" : "Lionel",
                "lname" : "Messi"
            }
        ],
        "age" : 32,
        "teams" : [
            "FCBarcelona",
            "Argentina"
        ],
        "position" : "RW",
        "rating" : 94
    }
    {
        "_id" : ObjectId("5d77350ccf5de44f995e742f"),
        "name" : [
            {
                "fname" : "Neymar",
                "lname" : "Jr"
            }
        ],
        "age" : 27,
        "teams" : [
            "PSG",
            "Brazil"
        ],
        "position" : "LW",
        "rating" : 92
    }
}

```

```

> db.FootballPlayers.insert({name:[{ fname:'Eden',lname:'Hazard'}], age:28, teams: ['RealMadrid',
'Belgium'], position: 'LW', rating: 91});
WriteResult({ "nInserted" : 1 })
> db.FootballPlayers.insert({name:[{ fname:'Kevin',lname:'DeBruyne'}], age:28, teams: ['ManCity',
'Belgium'], position: 'CAM', rating: 91});
WriteResult({ "nInserted" : 1 })
> db.FootballPlayers.insert({name:[{ fname:'Jan',lname:'Oblak'}], age:26, teams: ['AthleticoMadrid',
'Slovenia'], position: 'GK', rating: 90});
WriteResult({ "nInserted" : 1 })
> db.FootballPlayers.insert({name:[{ fname:'Virgil',lname:'VanDijk'}], age:28, teams: ['Liverpool',
'Netherlands'], position: 'CB', rating: 90});
WriteResult({ "nInserted" : 1 })
> db.FootballPlayers.insert({name:[{ fname:'Mohamed',lname:'Salah'}], age:27, teams: ['Liverpool',
'Egypt'], position: 'RW', rating: 90});
WriteResult({ "nInserted" : 1 })

```

```

> db.FootballPlayers.insert({name:[{fname:'Luka',lname:'Modric'}], age:34, teams: ['RealMadrid',
'Croatia'], position: 'CM', rating: 90});
WriteResult({ "nInserted" : 1 })
> db.FootballPlayers.insert({name:[{fname:'MarcAndre',lname:'TerStegen'}], age:27, teams:
['FCBarcelona', 'Germany'], position: 'GK', rating: 90});
WriteResult({ "nInserted" : 1 })
> db.FootballPlayers.find();
{ "_id" : ObjectId("5d77344ccf5de44f995e742d"), "name" : [ { "fname" : "Cristiano", "lname" :
"Ronaldo" } ], "age" : 34, "teams" : [ "Juventus", "Portugal" ], "position" : "ST", "rating" : 93 }
{ "_id" : ObjectId("5d7734dccb5de44f995e742e"), "name" : [ { "fname" : "Lionel", "lname" : "Messi" }
], "age" : 32, "teams" : [ "FCBarcelona", "Argentina" ], "position" : "RW", "rating" : 94 }
{ "_id" : ObjectId("5d77350ccf5de44f995e742f"), "name" : [ { "fname" : "Neymar", "lname" : "Jr" } ],
"age" : 27, "teams" : [ "PSG", "Brazil" ], "position" : "LW", "rating" : 92 }
{ "_id" : ObjectId("5d7735d9cf5de44f995e7430"), "name" : [ { "fname" : "Eden", "lname" :
"Hazard" } ], "age" : 28, "teams" : [ "RealMadrid", "Belgium" ], "position" : "LW", "rating" : 91 }
{ "_id" : ObjectId("5d773611cf5de44f995e7431"), "name" : [ { "fname" : "Kevin", "lname" :
"DeBruyne" } ], "age" : 28, "teams" : [ "ManCity", "Belgium" ], "position" : "CAM", "rating" : 91 }
{ "_id" : ObjectId("5d7736c4cf5de44f995e7432"), "name" : [ { "fname" : "Jan", "lname" : "Oblak" } ],
"age" : 26, "teams" : [ "AthleticoMadrid", "Slovenia" ], "position" : "GK", "rating" : 90 }
{ "_id" : ObjectId("5d7736ffcf5de44f995e7433"), "name" : [ { "fname" : "Virgil", "lname" :
"VanDijk" } ], "age" : 28, "teams" : [ "Liverpool", "Netherlands" ], "position" : "CB", "rating" : 90 }
{ "_id" : ObjectId("5d77379bcf5de44f995e7434"), "name" : [ { "fname" : "Mohamed", "lname" :
"Salah" } ], "age" : 27, "teams" : [ "Liverpool", "Egypt" ], "position" : "RW", "rating" : 90 }
{ "_id" : ObjectId("5d7737bfcf5de44f995e7435"), "name" : [ { "fname" : "Luka", "lname" : "Modric" }
], "age" : 34, "teams" : [ "RealMadrid", "Croatia" ], "position" : "CM", "rating" : 90 }
{ "_id" : ObjectId("5d77381ccf5de44f995e7436"), "name" : [ { "fname" : "MarcAndre", "lname" :
"TerStegen" } ], "age" : 27, "teams" : [ "FCBarcelona", "Germany" ], "position" : "GK", "rating" : 90 }
> db.FootballPlayers.find().pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",
  "rating" : 93
}
{
  "_id" : ObjectId("5d7734dccb5de44f995e742e"),
  "name" : [
    {
      "fname" : "Lionel",

```

```

        "lname" : "Messi"
    }
],
"age" : 32,
"teams" : [
    "FCBarcelona",
    "Argentina"
],
"position" : "RW",
"rating" : 94
}
{
    "_id" : ObjectId("5d77350ccf5de44f995e742f"),
    "name" : [
        {
            "fname" : "Neymar",
            "lname" : "Jr"
        }
    ],
    "age" : 27,
    "teams" : [
        "PSG",
        "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
}
{
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [
        {
            "fname" : "Eden",
            "lname" : "Hazard"
        }
    ],
    "age" : 28,
    "teams" : [
        "RealMadrid",
        "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
}
{
    "_id" : ObjectId("5d773611cf5de44f995e7431"),
    "name" : [
        {
            "fname" : "Kevin",
            "lname" : "DeBruyne"
        }
    ]
}

```

```

        }
    ],
    "age" : 28,
    "teams" : [
        "ManCity",
        "Belgium"
    ],
    "position" : "CAM",
    "rating" : 91
}
{
    "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
    "name" : [
        {
            "fname" : "Jan",
            "lname" : "Oblak"
        }
    ],
    "age" : 26,
    "teams" : [
        "AthleticoMadrid",
        "Slovenia"
    ],
    "position" : "GK",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
    "name" : [
        {
            "fname" : "Virgil",
            "lname" : "VanDijk"
        }
    ],
    "age" : 28,
    "teams" : [
        "Liverpool",
        "Netherlands"
    ],
    "position" : "CB",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77379bcf5de44f995e7434"),
    "name" : [
        {
            "fname" : "Mohamed",
            "lname" : "Salah"
        }
    ]
}

```

```

    ],
    "age" : 27,
    "teams" : [
        "Liverpool",
        "Egypt"
    ],
    "position" : "RW",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
    "name" : [
        {
            "fname" : "Luka",
            "lname" : "Modric"
        }
    ],
    "age" : 34,
    "teams" : [
        "RealMadrid",
        "Croatia"
    ],
    "position" : "CM",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77381ccf5de44f995e7436"),
    "name" : [
        {
            "fname" : "MarcAndre",
            "lname" : "TerStegen"
        }
    ],
    "age" : 27,
    "teams" : [
        "FCBarcelona",
        "Germany"
    ],
    "position" : "GK",
    "rating" : 90
}

```

```
> db.student.find({age:{$lt:30}});
```

Q4. Display data of all players whose age is less than 30.

```
> db.FootballPlayers.find({age:{$lt:30}});
```

```

{ "_id" : ObjectId("5d77350ccf5de44f995e742f"), "name" : [ { "fname" : "Neymar", "lname" : "Jr" } ],
  "age" : 27, "teams" : [ "PSG", "Brazil" ], "position" : "LW", "rating" : 92 }
{ "_id" : ObjectId("5d7735d9cf5de44f995e7430"), "name" : [ { "fname" : "Eden", "lname" :
  "Hazard" } ], "age" : 28, "teams" : [ "RealMadrid", "Belgium" ], "position" : "LW", "rating" : 91 }
{ "_id" : ObjectId("5d773611cf5de44f995e7431"), "name" : [ { "fname" : "Kevin", "lname" :

```

```

"DeBruyne" } ], "age" : 28, "teams" : [ "ManCity", "Belgium" ], "position" : "CAM", "rating" : 91 }
{ "_id" : ObjectId("5d7736c4cf5de44f995e7432"), "name" : [ { "fname" : "Jan", "lname" : "Oblak" } ],
"age" : 26, "teams" : [ "AthleticoMadrid", "Slovenia" ], "position" : "GK", "rating" : 90 }
{ "_id" : ObjectId("5d7736ffcf5de44f995e7433"), "name" : [ { "fname" : "Virgil", "lname" :
"VanDijk" } ], "age" : 28, "teams" : [ "Liverpool", "Netherlands" ], "position" : "CB", "rating" : 90 }
{ "_id" : ObjectId("5d77379bcf5de44f995e7434"), "name" : [ { "fname" : "Mohamed", "lname" :
"Salah" } ], "age" : 27, "teams" : [ "Liverpool", "Egypt" ], "position" : "RW", "rating" : 90 }
{ "_id" : ObjectId("5d77381ccf5de44f995e7436"), "name" : [ { "fname" : "MarcAndre", "lname" :
"TerStegen" } ], "age" : 27, "teams" : [ "FCBarcelona", "Germany" ], "position" : "GK", "rating" : 90 }
> db.FootballPlayers.find({age:{$lt:30}}).pretty();

```

```

{
  "_id" : ObjectId("5d77350ccf5de44f995e742f"),
  "name" : [
    {
      "fname" : "Neymar",
      "lname" : "Jr"
    }
  ],
  "age" : 27,
  "teams" : [
    "PSG",
    "Brazil"
  ],
  "position" : "LW",
  "rating" : 92
}
{
  "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
  "name" : [
    {
      "fname" : "Eden",
      "lname" : "Hazard"
    }
  ],
  "age" : 28,
  "teams" : [
    "RealMadrid",
    "Belgium"
  ],
  "position" : "LW",
  "rating" : 91
}
{
  "_id" : ObjectId("5d773611cf5de44f995e7431"),
  "name" : [
    {
      "fname" : "Kevin",
      "lname" : "DeBruyne"
    }
  ]
}

```



```

    ],
    "age" : 28,
    "teams" : [
        "ManCity",
        "Belgium"
    ],
    "position" : "CAM",
    "rating" : 91
}
{
    "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
    "name" : [
        {
            "fname" : "Jan",
            "lname" : "Oblak"
        }
    ],
    "age" : 26,
    "teams" : [
        "AthleticoMadrid",
        "Slovenia"
    ],
    "position" : "GK",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
    "name" : [
        {
            "fname" : "Virgil",
            "lname" : "VanDijk"
        }
    ],
    "age" : 28,
    "teams" : [
        "Liverpool",
        "Netherlands"
    ],
    "position" : "CB",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77379bcf5de44f995e7434"),
    "name" : [
        {
            "fname" : "Mohamed",
            "lname" : "Salah"
        }
    ],

```

```

    "age" : 27,
    "teams" : [
        "Liverpool",
        "Egypt"
    ],
    "position" : "RW",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77381ccf5de44f995e7436"),
    "name" : [
        {
            "fname" : "MarcAndre",
            "lname" : "TerStegen"
        }
    ],
    "age" : 27,
    "teams" : [
        "FCBarcelona",
        "Germany"
    ],
    "position" : "GK",
    "rating" : 90
}

```

Q5. Display data of all players whose rating is greater than equal to 90 and position is LW.

```

> db.FootballPlayers.find({$and:[{rating:{$gte:90}},{position:'LW'}]});
{ "_id" : ObjectId("5d77350ccf5de44f995e742f"), "name" : [ { "fname" : "Neymar", "lname" : "Jr" } ],
  "age" : 27, "teams" : [ "PSG", "Brazil" ], "position" : "LW", "rating" : 92 }
{ "_id" : ObjectId("5d7735d9cf5de44f995e7430"), "name" : [ { "fname" : "Eden", "lname" :
  "Hazard" } ], "age" : 28, "teams" : [ "RealMadrid", "Belgium" ], "position" : "LW", "rating" : 91 }
> db.FootballPlayers.find({$and:[{rating:{$gte:90}},{position:'LW'}]}).pretty();
{
    "_id" : ObjectId("5d77350ccf5de44f995e742f"),
    "name" : [
        {
            "fname" : "Neymar",
            "lname" : "Jr"
        }
    ],
    "age" : 27,
    "teams" : [
        "PSG",
        "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
}

```

```

{
  "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
  "name" : [
    {
      "fname" : "Eden",
      "lname" : "Hazard"
    }
  ],
  "age" : 28,
  "teams" : [
    "RealMadrid",
    "Belgium"
  ],
  "position" : "LW",
  "rating" : 91
}
> db.FootballPlayers.update({name: 'Pep'},{$set: {Team: 'ManCity'}}, upsert:true)
2019-09-10T11:40:00.807+0530 E QUERY   SyntaxError: Unexpected token :

```

Q6. Exhibit the working of upsert.

```

> db.FootballPlayers.update({name: 'Pep'},{$set: {Team: 'ManCity'}}, {upsert:true});
WriteResult({
  "nMatched" : 0,
  "nUpserted" : 1,
  "nModified" : 0,
  "_id" : ObjectId("5d773e444f61de78cbd01f92")
})

```

Q7. Display data of all players whose rating is greater than equal to 90 or position is LW.

```

> db.FootballPlayers.find({$or:[{rating:{$gte:90}},{position:'LW'}]});
{ "_id" : ObjectId("5d77344ccf5de44f995e742d"), "name" : [ { "fname" : "Cristiano", "lname" : "Ronaldo" } ], "age" : 34, "teams" : [ "Juventus", "Portugal" ], "position" : "ST", "rating" : 93 }
{ "_id" : ObjectId("5d7734dccf5de44f995e742e"), "name" : [ { "fname" : "Lionel", "lname" : "Messi" } ], "age" : 32, "teams" : [ "FCBarcelona", "Argentina" ], "position" : "RW", "rating" : 94 }
{ "_id" : ObjectId("5d77350ccf5de44f995e742f"), "name" : [ { "fname" : "Neymar", "lname" : "Jr" } ], "age" : 27, "teams" : [ "PSG", "Brazil" ], "position" : "LW", "rating" : 92 }
{ "_id" : ObjectId("5d7735d9cf5de44f995e7430"), "name" : [ { "fname" : "Eden", "lname" : "Hazard" } ], "age" : 28, "teams" : [ "RealMadrid", "Belgium" ], "position" : "LW", "rating" : 91 }
{ "_id" : ObjectId("5d773611cf5de44f995e7431"), "name" : [ { "fname" : "Kevin", "lname" : "DeBruyne" } ], "age" : 28, "teams" : [ "ManCity", "Belgium" ], "position" : "CAM", "rating" : 91 }
{ "_id" : ObjectId("5d7736c4cf5de44f995e7432"), "name" : [ { "fname" : "Jan", "lname" : "Oblak" } ], "age" : 26, "teams" : [ "AthleticoMadrid", "Slovenia" ], "position" : "GK", "rating" : 90 }
{ "_id" : ObjectId("5d7736ffcf5de44f995e7433"), "name" : [ { "fname" : "Virgil", "lname" : "VanDijk" } ], "age" : 28, "teams" : [ "Liverpool", "Netherlands" ], "position" : "CB", "rating" : 90 }
{ "_id" : ObjectId("5d77379bcf5de44f995e7434"), "name" : [ { "fname" : "Mohamed", "lname" : "Salah" } ], "age" : 27, "teams" : [ "Liverpool", "Egypt" ], "position" : "RW", "rating" : 90 }
{ "_id" : ObjectId("5d7737bfcf5de44f995e7435"), "name" : [ { "fname" : "Luka", "lname" : "Modric" } ], "age" : 34, "teams" : [ "RealMadrid", "Croatia" ], "position" : "CM", "rating" : 90 }
{ "_id" : ObjectId("5d77381ccf5de44f995e7436"), "name" : [ { "fname" : "MarcAndre", "lname" :

```

```

"TerStegen" } ], "age" : 27, "teams" : [ "FCBarcelona", "Germany" ], "position" : "GK", "rating" : 90 }
> db.FootballPlayers.find({$or:[{rating:{$gte:90}},{position:'LW'}]}).pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",
  "rating" : 93
}
{
  "_id" : ObjectId("5d7734dccf5de44f995e742e"),
  "name" : [
    {
      "fname" : "Lionel",
      "lname" : "Messi"
    }
  ],
  "age" : 32,
  "teams" : [
    "FCBarcelona",
    "Argentina"
  ],
  "position" : "RW",
  "rating" : 94
}
{
  "_id" : ObjectId("5d77350ccf5de44f995e742f"),
  "name" : [
    {
      "fname" : "Neymar",
      "lname" : "Jr"
    }
  ],
  "age" : 27,
  "teams" : [
    "PSG",
    "Brazil"
  ],
  "position" : "LW",
  "rating" : 92
}

```

```
}
{
  "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
  "name" : [
    {
      "fname" : "Eden",
      "lname" : "Hazard"
    }
  ],
  "age" : 28,
  "teams" : [
    "RealMadrid",
    "Belgium"
  ],
  "position" : "LW",
  "rating" : 91
}
{
  "_id" : ObjectId("5d773611cf5de44f995e7431"),
  "name" : [
    {
      "fname" : "Kevin",
      "lname" : "DeBruyne"
    }
  ],
  "age" : 28,
  "teams" : [
    "ManCity",
    "Belgium"
  ],
  "position" : "CAM",
  "rating" : 91
}
{
  "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
  "name" : [
    {
      "fname" : "Jan",
      "lname" : "Oblak"
    }
  ],
  "age" : 26,
  "teams" : [
    "AthleticoMadrid",
    "Slovenia"
  ],
  "position" : "GK",
  "rating" : 90
}
```

```
{
  "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
  "name" : [
    {
      "fname" : "Virgil",
      "lname" : "VanDijk"
    }
  ],
  "age" : 28,
  "teams" : [
    "Liverpool",
    "Netherlands"
  ],
  "position" : "CB",
  "rating" : 90
}
{
  "_id" : ObjectId("5d77379bcf5de44f995e7434"),
  "name" : [
    {
      "fname" : "Mohamed",
      "lname" : "Salah"
    }
  ],
  "age" : 27,
  "teams" : [
    "Liverpool",
    "Egypt"
  ],
  "position" : "RW",
  "rating" : 90
}
{
  "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
  "name" : [
    {
      "fname" : "Luka",
      "lname" : "Modric"
    }
  ],
  "age" : 34,
  "teams" : [
    "RealMadrid",
    "Croatia"
  ],
  "position" : "CM",
  "rating" : 90
}
{
```

```

    "_id" : ObjectId("5d77381ccf5de44f995e7436"),
    "name" : [
      {
        "fname" : "MarcAndre",
        "lname" : "TerStegen"
      }
    ],
    "age" : 27,
    "teams" : [
      "FCBarcelona",
      "Germany"
    ],
    "position" : "GK",
    "rating" : 90
  }
> db.FootballPlayers.find({$not:[{rating:{$gte:90}}]}).pretty();
... ^C

```

```

> db.FootballPlayers.find({$not:{rating:90}});
Error: error: {
  "$err" : "Can't canonicalize query: BadValue unknown top level operator: $not",
  "code" : 17287
}
> db.FootballPlayers.find({$not:[{rating:90}]});
Error: error: {
  "$err" : "Can't canonicalize query: BadValue unknown top level operator: $not",
  "code" : 17287
}
> db.FootballPlayers.find({rating:{$not:90}}).pretty();
Error: error: {
  "$err" : "Can't canonicalize query: BadValue $not needs a regex or a document",
  "code" : 17287
}

```

Q8. Display data of players whose rating is not 90.

```

> db.FootballPlayers.find({rating:{$not:{$eq:90}}}).pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",

```

```

    "rating" : 93
  }
  {
    "_id" : ObjectId("5d7734dccf5de44f995e742e"),
    "name" : [
      {
        "fname" : "Lionel",
        "lname" : "Messi"
      }
    ],
    "age" : 32,
    "teams" : [
      "FCBarcelona",
      "Argentina"
    ],
    "position" : "RW",
    "rating" : 94
  }
  {
    "_id" : ObjectId("5d77350ccf5de44f995e742f"),
    "name" : [
      {
        "fname" : "Neymar",
        "lname" : "Jr"
      }
    ],
    "age" : 27,
    "teams" : [
      "PSG",
      "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
  }
  {
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [
      {
        "fname" : "Eden",
        "lname" : "Hazard"
      }
    ],
    "age" : 28,
    "teams" : [
      "RealMadrid",
      "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
  }

```



```

}
{
  "_id" : ObjectId("5d773611cf5de44f995e7431"),
  "name" : [
    {
      "fname" : "Kevin",
      "lname" : "DeBruyne"
    }
  ],
  "age" : 28,
  "teams" : [
    "ManCity",
    "Belgium"
  ],
  "position" : "CAM",
  "rating" : 91
}
{
  "_id" : ObjectId("5d773e444f61de78cbd01f92"),
  "name" : "Pep",
  "Team" : "ManCity"
}
> db.FootballPlayers.find({teams: {$all:['RealMadrid']}});
{ "_id" : ObjectId("5d7735d9cf5de44f995e7430"), "name" : [ { "fname" : "Eden", "lname" :
"Hazard" } ], "age" : 28, "teams" : [ "RealMadrid", "Belgium" ], "position" : "LW", "rating" : 91 }
{ "_id" : ObjectId("5d7737bfcf5de44f995e7435"), "name" : [ { "fname" : "Luka", "lname" : "Modric" }
], "age" : 34, "teams" : [ "RealMadrid", "Croatia" ], "position" : "CM", "rating" : 90 }

```

Q9. Display data of all players who play for Real Madrid.

```
> db.FootballPlayers.find({teams: {$all:['RealMadrid']}}).pretty();
```

```

{
  "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
  "name" : [
    {
      "fname" : "Eden",
      "lname" : "Hazard"
    }
  ],
  "age" : 28,
  "teams" : [
    "RealMadrid",
    "Belgium"
  ],
  "position" : "LW",
  "rating" : 91
}
{
  "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
  "name" : [

```

```

        {
            "fname" : "Luka",
            "lname" : "Modric"
        }
    ],
    "age" : 34,
    "teams" : [
        "RealMadrid",
        "Croatia"
    ],
    "position" : "CM",
    "rating" : 90
}
> db.FootballPlayers.find({ name.fname:'Cristiano'}).pretty();
2019-09-10T11:53:21.333+0530 E QUERY   SyntaxError: Unexpected token .
> db.FootballPlayers.find({ name: { fname:'Cristiano'}}).pretty();
> db.FootballPlayers.find({ name: { fname:'Lionel'}}).pretty();
> db.FootballPlayers.find({name: {fname:'Lionel',lname:'Messi'}}).pretty();
{
  "_id" : ObjectId("5d7734dccf5de44f995e742e"),
  "name" : [
    {
      "fname" : "Lionel",
      "lname" : "Messi"
    }
  ],
  "age" : 32,
  "teams" : [
    "FCBarcelona",
    "Argentina"
  ],
  "position" : "RW",
  "rating" : 94
}
> db.FootballPlayers.find({ name.fname:'Cristiano'}).pretty();
2019-09-10T11:57:02.493+0530 E QUERY   SyntaxError: Unexpected token .
> db.FootballPlayers.find({'name'.fname:'Cristiano'}).pretty();
2019-09-10T11:57:11.173+0530 E QUERY   SyntaxError: Unexpected token .
> db.FootballPlayers.find({ name.fname:'Cristiano'}).pretty();
2019-09-10T11:57:17.053+0530 E QUERY   SyntaxError: Unexpected token .

```

Q10. Display data of player with first name Cristiano.

```

> db.FootballPlayers.find({'name.fname':'Cristiano'}).pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 33,
  "teams" : [
    "RealMadrid",
    "Croatia"
  ],
  "position" : "CM",
  "rating" : 90
}

```

```

        }
    ],
    "age" : 34,
    "teams" : [
        "Juventus",
        "Portugal"
    ],
    "position" : "ST",
    "rating" : 93
}
> db.FootballPlayers.update({rating:90},{ $set:{rating:89}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.FootballPlayers.find().pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",
  "rating" : 93
}
{
  "_id" : ObjectId("5d7734dccf5de44f995e742e"),
  "name" : [
    {
      "fname" : "Lionel",
      "lname" : "Messi"
    }
  ],
  "age" : 32,
  "teams" : [
    "FCBarcelona",
    "Argentina"
  ],
  "position" : "RW",
  "rating" : 94
}
{
  "_id" : ObjectId("5d77350ccf5de44f995e742f"),
  "name" : [
    {

```

```

        "fname" : "Neymar",
        "lname" : "Jr"
    }
],
"age" : 27,
"teams" : [
    "PSG",
    "Brazil"
],
"position" : "LW",
"rating" : 92
}
{
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [
        {
            "fname" : "Eden",
            "lname" : "Hazard"
        }
    ],
    "age" : 28,
    "teams" : [
        "RealMadrid",
        "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
}
{
    "_id" : ObjectId("5d773611cf5de44f995e7431"),
    "name" : [
        {
            "fname" : "Kevin",
            "lname" : "DeBruyne"
        }
    ],
    "age" : 28,
    "teams" : [
        "ManCity",
        "Belgium"
    ],
    "position" : "CAM",
    "rating" : 91
}
{
    "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
    "name" : [
        {
            "fname" : "Jan",

```

```

        "lname" : "Oblak"
    },
    ],
    "age" : 26,
    "teams" : [
        "AthleticoMadrid",
        "Slovenia"
    ],
    "position" : "GK",
    "rating" : 89
}
{
    "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
    "name" : [
        {
            "fname" : "Virgil",
            "lname" : "VanDijk"
        }
    ],
    "age" : 28,
    "teams" : [
        "Liverpool",
        "Netherlands"
    ],
    "position" : "CB",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77379bcf5de44f995e7434"),
    "name" : [
        {
            "fname" : "Mohamed",
            "lname" : "Salah"
        }
    ],
    "age" : 27,
    "teams" : [
        "Liverpool",
        "Egypt"
    ],
    "position" : "RW",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
    "name" : [
        {
            "fname" : "Luka",
            "lname" : "Modric"
        }
    ],
    "age" : 28,
    "teams" : [
        "RealMadrid",
        "Croatia"
    ],
    "position" : "RW",
    "rating" : 90
}
}

```

```

        }
    ],
    "age" : 34,
    "teams" : [
        "RealMadrid",
        "Croatia"
    ],
    "position" : "CM",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77381ccf5de44f995e7436"),
    "name" : [
        {
            "fname" : "MarcAndre",
            "lname" : "TerStegen"
        }
    ],
    "age" : 27,
    "teams" : [
        "FCBarcelona",
        "Germany"
    ],
    "position" : "GK",
    "rating" : 90
}
{
    "_id" : ObjectId("5d773e444f61de78cbd01f92"),
    "name" : "Pep",
    "Team" : "ManCity"
}

```

Q11. Update ratings of all players with rating 89 and change it to 90.

```
> db.FootballPlayers.update({rating:90},{ $set:{rating:89}},{multi:true});
```

```
WriteResult({ "nMatched" : 4, "nUpserted" : 0, "nModified" : 4 })
```

```
> db.FootballPlayers.find().pretty();
```

```

{
    "_id" : ObjectId("5d77344ccf5de44f995e742d"),
    "name" : [
        {
            "fname" : "Cristiano",
            "lname" : "Ronaldo"
        }
    ],
    "age" : 34,
    "teams" : [
        "Juventus",
        "Portugal"
    ],
    "position" : "ST",

```

```

    "rating" : 93
  }
  {
    "_id" : ObjectId("5d7734dccf5de44f995e742e"),
    "name" : [
      {
        "fname" : "Lionel",
        "lname" : "Messi"
      }
    ],
    "age" : 32,
    "teams" : [
      "FCBarcelona",
      "Argentina"
    ],
    "position" : "RW",
    "rating" : 94
  }
  {
    "_id" : ObjectId("5d77350ccf5de44f995e742f"),
    "name" : [
      {
        "fname" : "Neymar",
        "lname" : "Jr"
      }
    ],
    "age" : 27,
    "teams" : [
      "PSG",
      "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
  }
  {
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [
      {
        "fname" : "Eden",
        "lname" : "Hazard"
      }
    ],
    "age" : 28,
    "teams" : [
      "RealMadrid",
      "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
  }

```

```

}
{
  "_id" : ObjectId("5d773611cf5de44f995e7431"),
  "name" : [
    {
      "fname" : "Kevin",
      "lname" : "DeBruyne"
    }
  ],
  "age" : 28,
  "teams" : [
    "ManCity",
    "Belgium"
  ],
  "position" : "CAM",
  "rating" : 91
}
{
  "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
  "name" : [
    {
      "fname" : "Jan",
      "lname" : "Oblak"
    }
  ],
  "age" : 26,
  "teams" : [
    "AthleticoMadrid",
    "Slovenia"
  ],
  "position" : "GK",
  "rating" : 89
}
{
  "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
  "name" : [
    {
      "fname" : "Virgil",
      "lname" : "VanDijk"
    }
  ],
  "age" : 28,
  "teams" : [
    "Liverpool",
    "Netherlands"
  ],
  "position" : "CB",
  "rating" : 89
}

```



```
{
  "_id" : ObjectId("5d77379bcf5de44f995e7434"),
  "name" : [
    {
      "fname" : "Mohamed",
      "lname" : "Salah"
    }
  ],
  "age" : 27,
  "teams" : [
    "Liverpool",
    "Egypt"
  ],
  "position" : "RW",
  "rating" : 89
}
{
  "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
  "name" : [
    {
      "fname" : "Luka",
      "lname" : "Modric"
    }
  ],
  "age" : 34,
  "teams" : [
    "RealMadrid",
    "Croatia"
  ],
  "position" : "CM",
  "rating" : 89
}
{
  "_id" : ObjectId("5d77381ccf5de44f995e7436"),
  "name" : [
    {
      "fname" : "MarcAndre",
      "lname" : "TerStegen"
    }
  ],
  "age" : 27,
  "teams" : [
    "FCBarcelona",
    "Germany"
  ],
  "position" : "GK",
  "rating" : 89
}
{
```

```

    "_id" : ObjectId("5d773e444f61de78cbd01f92"),
    "name" : "Pep",
    "Team" : "ManCity"
  }
> db.FootballPlayers.update({rating:89},{ $set:{rating:90}}, {multi:true});
WriteResult({ "nMatched" : 5, "nUpserted" : 0, "nModified" : 5 })
> db.FootballPlayers.find().pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",
  "rating" : 93
}
{
  "_id" : ObjectId("5d7734dccf5de44f995e742e"),
  "name" : [
    {
      "fname" : "Lionel",
      "lname" : "Messi"
    }
  ],
  "age" : 32,
  "teams" : [
    "FCBarcelona",
    "Argentina"
  ],
  "position" : "RW",
  "rating" : 94
}
{
  "_id" : ObjectId("5d77350ccf5de44f995e742f"),
  "name" : [
    {
      "fname" : "Neymar",
      "lname" : "Jr"
    }
  ],
  "age" : 27,
  "teams" : [

```

```

        "PSG",
        "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
}
{
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [
        {
            "fname" : "Eden",
            "lname" : "Hazard"
        }
    ],
    "age" : 28,
    "teams" : [
        "RealMadrid",
        "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
}
{
    "_id" : ObjectId("5d773611cf5de44f995e7431"),
    "name" : [
        {
            "fname" : "Kevin",
            "lname" : "DeBruyne"
        }
    ],
    "age" : 28,
    "teams" : [
        "ManCity",
        "Belgium"
    ],
    "position" : "CAM",
    "rating" : 91
}
{
    "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
    "name" : [
        {
            "fname" : "Jan",
            "lname" : "Oblak"
        }
    ],
    "age" : 26,
    "teams" : [
        "AthleticoMadrid",

```

```

        "Slovenia"
    ],
    "position" : "GK",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
    "name" : [
        {
            "fname" : "Virgil",
            "lname" : "VanDijk"
        }
    ],
    "age" : 28,
    "teams" : [
        "Liverpool",
        "Netherlands"
    ],
    "position" : "CB",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77379bcf5de44f995e7434"),
    "name" : [
        {
            "fname" : "Mohamed",
            "lname" : "Salah"
        }
    ],
    "age" : 27,
    "teams" : [
        "Liverpool",
        "Egypt"
    ],
    "position" : "RW",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
    "name" : [
        {
            "fname" : "Luka",
            "lname" : "Modric"
        }
    ],
    "age" : 34,
    "teams" : [
        "RealMadrid",
        "Croatia"
    ]
}

```

```

    ],
    "position" : "CM",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d77381ccf5de44f995e7436"),
    "name" : [
      {
        "fname" : "MarcAndre",
        "lname" : "TerStegen"
      }
    ],
    "age" : 27,
    "teams" : [
      "FCBarcelona",
      "Germany"
    ],
    "position" : "GK",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d773e444f61de78cbd01f92"),
    "name" : "Pep",
    "Team" : "ManCity"
  }

```

```
bash-4.2$ cd mongodb-linux-x86_64-3.0.4
```

```
bash-4.2$ cd bin
```

```
bash-4.2$ ./mongo 10.10.10.54/t31255db -u t31255 -p t31255
```

```
MongoDB shell version: 3.0.4
```

```
connecting to: 10.10.10.54/t31255db
```

```
2019-09-19T13:24:08.659+0530 W NETWORK Failed to connect to 10.10.10.54:27017, reason:
errno:113 No route to host
```

```
2019-09-19T13:24:08.662+0530 E QUERY Error: couldn't connect to server 10.10.10.54:27017
(10.10.10.54), connection attempt failed
```

```
at connect (src/mongo/shell/mongo.js:181:14)
```

```
at (connect):1:6 at src/mongo/shell/mongo.js:181
```

```
exception: connect failed
```

```
bash-4.2$ ./mongo 10.10.10.54/t31255db -u t31255 -p t31255
```

```
MongoDB shell version: 3.0.4
```

```
connecting to: 10.10.10.54/t31255db
```

```
2019-09-19T13:24:41.482+0530 W NETWORK Failed to connect to 10.10.10.54:27017, reason:
errno:113 No route to host
```

```
2019-09-19T13:24:41.485+0530 E QUERY Error: couldn't connect to server 10.10.10.54:27017
(10.10.10.54), connection attempt failed
```

```
at connect (src/mongo/shell/mongo.js:181:14)
```

```
at (connect):1:6 at src/mongo/shell/mongo.js:181
```

```
exception: connect failed
```

```
bash-4.2$ ./mongo 10.10.10.54/t31255db -u t31255 -p t31255
```

```
MongoDB shell version: 3.0.4
```

```

connecting to: 10.10.10.54/t31255db
2019-09-19T13:26:38.553+0530 W NETWORK Failed to connect to 10.10.10.54:27017, reason:
errno:113 No route to host
2019-09-19T13:26:38.556+0530 E QUERY Error: couldn't connect to server 10.10.10.54:27017
(10.10.10.54), connection attempt failed
    at connect (src/mongo/shell/mongo.js:181:14)
    at (connect):1:6 at src/mongo/shell/mongo.js:181
exception: connect failed
bash-4.2$ ./mongo 10.10.10.54/t31255db -u t31255 -p t31255
MongoDB shell version: 3.0.4
connecting to: 10.10.10.54/t31255db
Server has startup warnings:
2019-09-19T13:03:49.431+0530 I CONTROL [initandlisten] ** WARNING: You are running this
process as the root user, which is not recommended.
2019-09-19T13:03:49.431+0530 I CONTROL [initandlisten]
2019-09-19T13:03:49.431+0530 I CONTROL [initandlisten]
2019-09-19T13:03:49.431+0530 I CONTROL [initandlisten] ** WARNING:
/sys/kernel/mm/transparent_hugepage/defrag is 'always'.
2019-09-19T13:03:49.431+0530 I CONTROL [initandlisten] ** We suggest setting it to 'never'
2019-09-19T13:03:49.431+0530 I CONTROL [initandlisten]
> db.FootballPlayers.find().pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),
  "name" : [
    {
      "fname" : "Cristiano",
      "lname" : "Ronaldo"
    }
  ],
  "age" : 34,
  "teams" : [
    "Juventus",
    "Portugal"
  ],
  "position" : "ST",
  "rating" : 93
}
{
  "_id" : ObjectId("5d7734dccb5de44f995e742e"),
  "name" : [
    {
      "fname" : "Lionel",
      "lname" : "Messi"
    }
  ],
  "age" : 32,
  "teams" : [
    "FCBarcelona",
    "Argentina"
  ]
}

```

```

    ],
    "position" : "RW",
    "rating" : 94
  }
  {
    "_id" : ObjectId("5d77350ccf5de44f995e742f"),
    "name" : [
      {
        "fname" : "Neymar",
        "lname" : "Jr"
      }
    ],
    "age" : 27,
    "teams" : [
      "PSG",
      "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
  }
  {
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [
      {
        "fname" : "Eden",
        "lname" : "Hazard"
      }
    ],
    "age" : 28,
    "teams" : [
      "RealMadrid",
      "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
  }
  {
    "_id" : ObjectId("5d773611cf5de44f995e7431"),
    "name" : [
      {
        "fname" : "Kevin",
        "lname" : "DeBruyne"
      }
    ],
    "age" : 28,
    "teams" : [
      "ManCity",
      "Belgium"
    ],
  }

```

```

    "position" : "CAM",
    "rating" : 91
  }
  {
    "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
    "name" : [
      {
        "fname" : "Jan",
        "lname" : "Oblak"
      }
    ],
    "age" : 26,
    "teams" : [
      "AthleticoMadrid",
      "Slovenia"
    ],
    "position" : "GK",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
    "name" : [
      {
        "fname" : "Virgil",
        "lname" : "VanDijk"
      }
    ],
    "age" : 28,
    "teams" : [
      "Liverpool",
      "Netherlands"
    ],
    "position" : "CB",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d77379bcf5de44f995e7434"),
    "name" : [
      {
        "fname" : "Mohamed",
        "lname" : "Salah"
      }
    ],
    "age" : 27,
    "teams" : [
      "Liverpool",
      "Egypt"
    ],
    "position" : "RW",

```



```

    "rating" : 90
  }
  {
    "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
    "name" : [
      {
        "fname" : "Luka",
        "lname" : "Modric"
      }
    ],
    "age" : 34,
    "teams" : [
      "RealMadrid",
      "Croatia"
    ],
    "position" : "CM",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d77381ccf5de44f995e7436"),
    "name" : [
      {
        "fname" : "MarcAndre",
        "lname" : "TerStegen"
      }
    ],
    "age" : 27,
    "teams" : [
      "FCBarcelona",
      "Germany"
    ],
    "position" : "GK",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d773e444f61de78cbd01f92"),
    "name" : "Pep",
    "Team" : "ManCity"
  }
}
> db.FootballPlayers.updateOne({teams: 'PSG'}, {$set: {'teams.$':'FCBarcelona'}})
2019-09-19T13:43:19.211+0530 E QUERY   TypeError: Property 'updateOne' of object
t31255db.FootballPlayers is not a function
at (shell):1:20

```

Q12. Change the team of player with team PSG to FCBarcelona

```

> db.FootballPlayers.update({teams: 'PSG'}, {$set: {'teams.$':'FCBarcelona'}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.FootballPlayers.find().pretty();
{
  "_id" : ObjectId("5d77344ccf5de44f995e742d"),

```

```

    "name" : [
      {
        "fname" : "Cristiano",
        "lname" : "Ronaldo"
      }
    ],
    "age" : 34,
    "teams" : [
      "Juventus",
      "Portugal"
    ],
    "position" : "ST",
    "rating" : 93
  }
  {
    "_id" : ObjectId("5d7734dccf5de44f995e742e"),
    "name" : [
      {
        "fname" : "Lionel",
        "lname" : "Messi"
      }
    ],
    "age" : 32,
    "teams" : [
      "FCBarcelona",
      "Argentina"
    ],
    "position" : "RW",
    "rating" : 94
  }
  {
    "_id" : ObjectId("5d77350ccf5de44f995e742f"),
    "name" : [
      {
        "fname" : "Neymar",
        "lname" : "Jr"
      }
    ],
    "age" : 27,
    "teams" : [
      "FCBarcelona",
      "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
  }
  {
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [

```

```

        {
            "fname" : "Eden",
            "lname" : "Hazard"
        }
    ],
    "age" : 28,
    "teams" : [
        "RealMadrid",
        "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
}
{
    "_id" : ObjectId("5d773611cf5de44f995e7431"),
    "name" : [
        {
            "fname" : "Kevin",
            "lname" : "DeBruyne"
        }
    ],
    "age" : 28,
    "teams" : [
        "ManCity",
        "Belgium"
    ],
    "position" : "CAM",
    "rating" : 91
}
{
    "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
    "name" : [
        {
            "fname" : "Jan",
            "lname" : "Oblak"
        }
    ],
    "age" : 26,
    "teams" : [
        "AthleticoMadrid",
        "Slovenia"
    ],
    "position" : "GK",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
    "name" : [
        {

```

```

        "fname" : "Virgil",
        "lname" : "VanDijk"
    }
],
"age" : 28,
"teams" : [
    "Liverpool",
    "Netherlands"
],
"position" : "CB",
"rating" : 90
}
{
    "_id" : ObjectId("5d77379bcf5de44f995e7434"),
    "name" : [
        {
            "fname" : "Mohamed",
            "lname" : "Salah"
        }
    ],
    "age" : 27,
    "teams" : [
        "Liverpool",
        "Egypt"
    ],
    "position" : "RW",
    "rating" : 90
}
{
    "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
    "name" : [
        {
            "fname" : "Luka",
            "lname" : "Modric"
        }
    ],
    "age" : 34,
    "teams" : [
        "RealMadrid",
        "Croatia"
    ],
    "position" : "CM",
    "rating" : 90
}
{
    "_id" : ObjectId("5d77381ccf5de44f995e7436"),
    "name" : [
        {
            "fname" : "MarcAndre",

```

```

        "lname" : "TerStegen"
    },
    ],
    "age" : 27,
    "teams" : [
        "FCBarcelona",
        "Germany"
    ],
    "position" : "GK",
    "rating" : 90
}
{
    "_id" : ObjectId("5d773e444f61de78cbd01f92"),
    "name" : "Pep",
    "Team" : "ManCity"
}

```

Q13. Update by accessing embedded document.

```

> db.FootballPlayers.update({'name.fname':'Cristiano'},{$set:{age:33}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.FootballPlayers.find().pretty();

```

```

{
    "_id" : ObjectId("5d77344ccf5de44f995e742d"),
    "name" : [
        {
            "fname" : "Cristiano",
            "lname" : "Ronaldo"
        }
    ],
    "age" : 33,
    "teams" : [
        "Juventus",
        "Portugal"
    ],
    "position" : "ST",
    "rating" : 93
}
{
    "_id" : ObjectId("5d7734dccf5de44f995e742e"),
    "name" : [
        {
            "fname" : "Lionel",
            "lname" : "Messi"
        }
    ],
    "age" : 32,
    "teams" : [
        "FCBarcelona",
        "Argentina"
    ],
    "position" : "ST",
    "rating" : 94
}

```

```

    "position" : "RW",
    "rating" : 94
  }
  {
    "_id" : ObjectId("5d77350ccf5de44f995e742f"),
    "name" : [
      {
        "fname" : "Neymar",
        "lname" : "Jr"
      }
    ],
    "age" : 27,
    "teams" : [
      "FCBarcelona",
      "Brazil"
    ],
    "position" : "LW",
    "rating" : 92
  }
  {
    "_id" : ObjectId("5d7735d9cf5de44f995e7430"),
    "name" : [
      {
        "fname" : "Eden",
        "lname" : "Hazard"
      }
    ],
    "age" : 28,
    "teams" : [
      "RealMadrid",
      "Belgium"
    ],
    "position" : "LW",
    "rating" : 91
  }
  {
    "_id" : ObjectId("5d773611cf5de44f995e7431"),
    "name" : [
      {
        "fname" : "Kevin",
        "lname" : "DeBruyne"
      }
    ],
    "age" : 28,
    "teams" : [
      "ManCity",
      "Belgium"
    ],
    "position" : "CAM",
  }

```

```

    "rating" : 91
  }
  {
    "_id" : ObjectId("5d7736c4cf5de44f995e7432"),
    "name" : [
      {
        "fname" : "Jan",
        "lname" : "Oblak"
      }
    ],
    "age" : 26,
    "teams" : [
      "AthleticoMadrid",
      "Slovenia"
    ],
    "position" : "GK",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d7736ffcf5de44f995e7433"),
    "name" : [
      {
        "fname" : "Virgil",
        "lname" : "VanDijk"
      }
    ],
    "age" : 28,
    "teams" : [
      "Liverpool",
      "Netherlands"
    ],
    "position" : "CB",
    "rating" : 90
  }
  {
    "_id" : ObjectId("5d77379bcf5de44f995e7434"),
    "name" : [
      {
        "fname" : "Mohamed",
        "lname" : "Salah"
      }
    ],
    "age" : 27,
    "teams" : [
      "Liverpool",
      "Egypt"
    ],
    "position" : "RW",
    "rating" : 90
  }

```

```

    }
    {
      "_id" : ObjectId("5d7737bfcf5de44f995e7435"),
      "name" : [
        {
          "fname" : "Luka",
          "lname" : "Modric"
        }
      ],
      "age" : 34,
      "teams" : [
        "RealMadrid",
        "Croatia"
      ],
      "position" : "CM",
      "rating" : 90
    }
    {
      "_id" : ObjectId("5d77381ccf5de44f995e7436"),
      "name" : [
        {
          "fname" : "MarcAndre",
          "lname" : "TerStegen"
        }
      ],
      "age" : 27,
      "teams" : [
        "FCBarcelona",
        "Germany"
      ],
      "position" : "GK",
      "rating" : 90
    }
    {
      "_id" : ObjectId("5d773e444f61de78cbd01f92"),
      "name" : "Pep",
      "Team" : "ManCity"
    }
  }
  > db.FootballPlayers.update({'name.fname':'Cristiano'},{$set:{age:34}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })

```