

1) Create a Database called student

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/student";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  console.log("Database created!");
  db.close();
});
```

```
ukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 01.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 01.js`
(node:13172) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
Database created!
[nodemon] clean exit - waiting for changes before restart
```

2) Create a collection called studentmarks

```

1  var MongoClient = require('mongodb').MongoClient;
2  var url = "mongodb://localhost:27017/";
3
4  MongoClient.connect(url, function(err, db) {
5    if (err) throw err;
6    var dbo = db.db("student");
7    dbo.createCollection("studentmarks", function(err, res) {
8      if (err) throw err;
9      console.log("Collection created!");
10     db.close();
11   });
12 });
13

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 02.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 02.js`
(node:13699) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
Collection created!
[nodemon] clean exit - waiting for changes before restart

```

3) Create the documents listed in above table.

```

1  var MongoClient = require('mongodb').MongoClient;
2  var url = "mongodb://localhost:27017/";
3
4  MongoClient.connect(url, function(err, db) {
5      if (err) throw err;
6      var dbo = db.db("student");
7      var myobj = [
8          { name: 'Mala', maths_marks:45, english_marks:53 , science_marks:72},
9          { name: 'Vanu', maths_marks:80, english_marks:75 , science_marks:85},
10         { name: 'Kala', maths_marks:32, english_marks:46, science_marks:53},
11         { name: 'Aruli', maths_marks:78, english_marks:85 , science_marks:80},
12         { name: 'Shayu', maths_marks:80, english_marks:76 , science_marks:65},
13         { name: 'Kumaran', maths_marks:32, english_marks:73 , science_marks:84},
14         { name: 'Lucky', maths_marks:66, english_marks:90, science_marks:45},
15         { name: 'Gva', maths_marks:71, english_marks:75, science_marks:56},
16         { name: 'Lucky', maths_marks:41, english_marks:65, science_marks:88}
17     ];
18     dbo.collection("studentmarks").insertMany(myobj, function(err, res) {
19         if (err) throw err;
20         console.log("Number of documents inserted: " + res.insertedCount);
21         db.close();
22     });
23 });
24

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 03.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 03.js`
(node:14196) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
Number of documents inserted: 9
[nodemon] clean exit - waiting for changes before restart

```

4) Increase the maths marks of Mala by 6 marks

```

1 var MongoClient = require('mongodb').MongoClient;
2
3 var url = "mongodb://127.0.0.1:27017/";
4
5
6
7 MongoClient.connect(url, function(err, db) {
8
9     if (err) throw err;
10
11     var dbo = db.db("student");
12
13     var myquery = { name: "Mala" };
14
15     var newvalues = { $inc: {maths_marks: 6} };
16
17     dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
18
19         if (err) throw err;
20
21         console.log("1 document updated");
22
23         db.close();
24
25     });
26
27 });|

```

```

ukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 04.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 04.js`
(node:2668) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
1 document updated
[nodemon] clean exit - waiting for changes before restart

```

5) List the names of students who got more than 50 marks in Maths Subject.


```
1 var MongoClient = require('mongodb').MongoClient;
2
3 var url = "mongodb://localhost:27017/";
4
5 MongoClient.connect(url, function(err, db) {
6
7     if (err) throw err;
8
9     var dbo = db.db("student");
10
11     var query = {"maths_marks":{"$gt":50}};
12
13     dbo.collection("studentmarks").find(query, { projection: {_id:0,science_marks:0,english_marks:0} })
14     .toArray(function(err, result) {
15
16         if (err) throw err;
17
18         console.log(result);
19
20         db.close();
21
22     });
23
24 });
```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2\$ nodemon 05.js

```
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 05.js`
(node:2920) DeprecationWarning: current URL string parser is deprecated, and will be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
[ { name: 'Mala', maths_marks: 63 },
  { name: 'Vanu', maths_marks: 80 },
  { name: 'Aruli', maths_marks: 78 },
  { name: 'Shayu', maths_marks: 80 },
  { name: 'Lucky', maths_marks: 66 },
  { name: 'Gva', maths_marks: 71 } ]
[nodemon] clean exit - waiting for changes before restart
```

6) Add a new column(field) for Average for all students.

```

var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://127.0.0.1:27017/";

MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("student");

  var myquery = { };

  var newvalues = { $set: {average: "" } };

  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {

    if (err) throw err;

    console.log("1 document updated");

    db.close();

  });

});

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 06.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 06.js`
(node:3227) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
1 document updated
[nodemon] clean exit - waiting for changes before restart

```

7) Update Marks_Science=75 to Lucky .

```

1  var MongoClient = require('mongodb').MongoClient;
2
3  var url = "mongodb://127.0.0.1:27017/";
4
5
6
7  MongoClient.connect(url, function(err, db) {
8
9      if (err) throw err;
10
11      var dbo = db.db("student");
12
13      var myquery = { name: "Lucky" };
14
15      var newvalues = { $set: {science_marks:75 } };
16
17      dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
18
19          if (err) throw err;
20
21          console.log("1 document updated");
22
23          db.close();
24
25      });
26
27  });
28

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 07.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 07.js`
(node:3825) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
1 document updated
[nodemon] clean exit - waiting for changes before restart

```

8) List the names who got more than 50 marks in all subjects.

```

var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("student");

  var query = {$and:[{"maths_marks":{"$gt:50"}},{"english_marks":{"$gt:50"}},{"science_marks":{"$gt:50"}}]};

  dbo.collection("studentmarks").find(query, { projection: { _id:0,science_marks:0,english_marks:0,maths_marks:0}
  | })).toArray(function(err, result) {

    if (err) throw err;

    console.log(result);

    db.close();

  });

});

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 08.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 08.js`
(node:4036) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
[ { name: 'Mala', average: '' },
  { name: 'Vanu' },
  { name: 'Aruli' },
  { name: 'Shayu' },
  { name: 'Lucky' },
  { name: 'Gva' } ]
[nodemon] clean exit - waiting for changes before restart

```

9) List the names who got less than 50 marks in Maths subject and more than 50 marks in English


```

1  var MongoClient = require('mongodb').MongoClient;
2
3  var url = "mongodb://localhost:27017/";
4
5
6
7  MongoClient.connect(url, function(err, db) {
8
9      if (err) throw err;
10
11      var dbo = db.db("student");
12
13      dbo.collection("studentmarks").find({$and:[{maths_marks:{<50}},{english_marks:{>50}}]}, { projection:
14          { _id: 0, name: 1 } }).toArray(function(err, result) {
15
16          if (err) throw err;
17
18          console.log(result);
19
20          db.close();
21
22      });
23
24  });
25

```

```

[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 09.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 09.js`
(node:4311) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
[ { name: 'Kumaran' }, { name: 'Lucky' } ]
[nodemon] clean exit - waiting for changes before restart

```

10) List the names who got less than 40 in both Maths and Science.

```

var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("student");

  dbo.collection("studentmarks").find({$and:[{maths_marks:{$lt:40}},{science_marks:{$lt:40}}]}, { projection:
    { _id: 0, name: 1 } }).toArray(function(err, result) {

    if (err) throw err;

    console.log(result);

    db.close();

  });

});

```

```

[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 10.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 10.js`
(node:4557) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser:
true } to MongoClient.connect.
[]
[nodemon] clean exit - waiting for changes before restart

```

11) Remove Science column/field for Raam

```

1  var MongoClient = require('mongodb').MongoClient;
2
3  var url = "mongodb://127.0.0.1:27017/";
4
5
6
7  MongoClient.connect(url, function(err, db) {
8
9      if (err) throw err;
10
11     var dbo = db.db("student");
12
13     var myquery = {name: 'Raam' };
14
15     var newvalues = {$unset:{science_marks:88}};
16
17     dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
18
19         if (err) throw err;
20
21         console.log("1 document updated");
22
23         db.close();
24
25     });
26
27 });

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 11.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 11.js`
(node:4809) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
1 document updated
[nodemon] clean exit - waiting for changes before restart

```

12) Update John's Math mark as 87 and English mark as 23, if john not available upsert.

```

var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("student");

  var myobj = { name: "John", maths_marks: 87, english_marks:23 };

  dbo.collection("studentmarks").insertOne(myobj,{upsert: true, safe: false}, function(err, res) {

    if (err) throw err;

    console.log("1 document upserted");

    db.close();

  });

});

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 12.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 12.js`
(node:5171) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
1 document upserted
[nodemon] clean exit - waiting for changes before restart

```

13) Rename the english_marks column/field for John to science_marks


```

1  var MongoClient = require('mongodb').MongoClient;
2
3  var url = "mongodb://127.0.0.1:27017/";
4
5
6
7  MongoClient.connect(url, function(err, db) {
8
9      if (err) throw err;
10
11      var dbo = db.db("student");
12
13      var myquery = { _id: "Lucky" };
14
15      var newvalues = { $rename: {"english_marks":"science_marks" } };
16
17      dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
18
19          if (err) throw err;
20
21          console.log("1 document updated");
22
23          db.close();
24
25      });
26
27  });|

```

```

[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 13.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 13.js`
(node:5438) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser:
true } to MongoClient.connect.
1 document updated
[nodemon] clean exit - waiting for changes before restart

```

14) Remove Kumaran's document from collection

```

var MongoClient = require('mongodb').MongoClient;

var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {

  if (err) throw err;

  var dbo = db.db("student");

  var myquery = { address: 'Mountain 21' };

  dbo.collection("studentmarks").deleteOne(myquery, function(err, obj) {

    if (err) throw err;

    console.log("1 document deleted");

    db.close();

  });

});

```

```

^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 14.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 14.js`
(node:5643) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
1 document deleted
[nodemon] clean exit - waiting for changes before restart

```

15) Find Kala's or Aruli's math_marks and science_marks

```

1  var MongoClient = require('mongodb').MongoClient;
2
3  var url = "mongodb://localhost:27017/";
4
5
6
7  MongoClient.connect(url, function(err, db) {
8
9      if (err) throw err;
10
11      var dbo = db.db("student");
12
13      dbo.collection("studentmarks").find({$or:[{name:"Aruli"},{name:"Kala"}]}).toArray(function(err, result) {
14
15
16          if (err) throw err;
17
18          console.log(result);
19
20          db.close();
21
22      });
23
24  });
25

```

```

[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Documents/uki5/NodeMongodb Exercises2$ nodemon 15.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 15.js`
(node:5848) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
[ { name: 'Kala', maths_marks: 32, science_marks: 53 },
  { name: 'Aruli', maths_marks: 78, science_marks: 80 } ]
[nodemon] clean exit - waiting for changes before restart

```