1) Create a Database called student

```
qu11.js                    ×
1   var MongoClient = require('mongodb').MongoClient;
2   var url = "mongodb://localhost:27017/student";
3
4   MongoClient.connect(url, function(err, db) {
5     if (err) throw err;
6     console.log("Database created!");
7     db.close();
8   });
9
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu11.js
(node:11850) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
Database created!
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

2) Create a collection called studentmarks

```
qu12.js                        ×
1    var MongoClient = require('mongodb').MongoClient;
2    var url = "mongodb://localhost:27017/student";
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
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu11.js
(node:11850) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
Database created!
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

3) Create the documents listed in above table.

```
qu13.js                          ×

 3
 4   MongoClient.connect(url, function(err, db) {
 5     if (err) throw err;
 6     var dbo = db.db("student");
 7     var myobj = [
 8       {
 9         name: "Mala",maths_marks:45 ,english_marks:53,science_marks: 72
10     },
11     {
12         name: "Vanu",maths_marks: 80,english_marks: 75,science_marks: 85
13     },
14     {
15         name: "Kala",maths_marks: 32,english_marks: 46,science_marks: 53
16     },
17     {
18         name: "Aruli",maths_marks: 78,english_marks: 85,science_marks: 80
19     },
20     {
21     name: "Shayu",maths_marks: 80,english_marks: 76,science_marks: 65
22     },
23     {
24         name: "Kumaran",maths_marks: 32,english_marks: 73,science_marks: 84
25     },
26     {
27         name : "Lucky",maths_marks: 66,english_marks: 90, science_marks : 45
28     },
29     {
30         name : "Gva",maths_marks : 71,english_marks : 75,cience_marks : 56
31     },
32     {
33         name: "Raam",maths_marks: 41,english_marks: 65,science_marks: 88
34   }
35
36     ];
37     dbo.collection("studentmarks").insertMany(myobj, function(err, res) {
38       if (err) throw err;
39       console.log("Number of documents inserted: " + res.insertedCount);
40       db.close();
41     });
42   });
43
js mongodb/qu13.js   43:1
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu13.js
(node:12924) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
Number of documents inserted: 9
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

4) Increase the maths marks of Mala by 6 marks

```
qu14.js                    ×

1   var MongoClient = require('mongodb').MongoClient;
2   var url = "mongodb://localhost:27017/student";
3   MongoClient.connect(url, function(err, db) {
4     if (err) throw err;
5     var dbo = db.db("student");
6     var myquery = { name: "Mala" };
7     var newvalues = { $inc: {maths_marks:6 } };
8     dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
9       if (err) throw err;
10      console.log("1 document updated");
11      db.close();
12    });
13  });
14
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu14.js
(node:13271) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
1 document updated
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

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

```
qu15.js                    ×

1   var MongoClient = require('mongodb').MongoClient;
2   var url = "mongodb://localhost:27017/student";
3
4   MongoClient.connect(url, function(err, db) {
5     if (err) throw err;
6     var dbo = db.db("student");
7     dbo.collection("studentmarks").find({maths_marks:{$gt:50}}).toArray(function(err, result) {
8       if (err) throw err;
9       console.log(result);
10      db.close();
11    });
12  });
13
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu15.js
(node:13609) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
[ { _id: 5c3eb7b3581db2f654ce1403,
    name: 'Mala',
    maths_marks: 62,
    english_marks: 53,
    science_marks: 72,
    average: 1 },
  { _id: 5c3eb7fd581db2f654ce1404,
    name: 'Vanu',
    maths_marks: 80,
    english_marks: 75,
    science_marks: 85,
    average: 1 },
  { _id: 5c3eb943581db2f654ce1408,
    name: 'Shayu',
    maths_marks: 80,
    english_marks: 76,
    science_marks: 65,
    average: 1 },
  { _id: 5c3eb98b581db2f654ce140a,
    name: 'Lucky',
```

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

```
qu15.js            ×     qu16.js            ×

 1   var MongoClient = require('mongodb').MongoClient;
 2   var url = "mongodb://127.0.0.1:27017/student";
 3
 4   MongoClient.connect(url, function(err, db) {
 5     if (err) throw err;
 6     var dbo = db.db("student");
 7     var myquery = {};
 8     var newvalues = {$set: {Average: ""}};
 9     dbo.collection("studentmarks").updateMany(myquery, newvalues, function(err, res) {
10       if (err) throw err;
11       console.log("Average inputed");
12       db.close();
13     });
14   });
15
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu16.js
(node:13976) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
Average inputed
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

7) Update Marks_Science=75 to Lucky .

```
qu17.js                    ×
1    var MongoClient = require('mongodb').MongoClient;
2    var url = "mongodb://127.0.0.1:27017/student";
3
4    MongoClient.connect(url, function(err, db) {
5      if (err) throw err;
6      var dbo = db.db("student");
7      var myquery = { name: "Lucky" };
8      var newvalues = { $set: {science_marks:75 }};
9      dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
10       if (err) throw err;
11       console.log(" updated");
12       db.close();
13     });
14   });
15
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu17.js
(node:14342) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
 updated
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

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

```
qu17.js            ×    qu18.js              ×
1    var MongoClient = require('mongodb').MongoClient;
2    var url = "mongodb://localhost:27017/student";
3
4    MongoClient.connect(url, function(err, db) {
5      if (err) throw err;
6      var dbo = db.db("student");
7      dbo.collection("studentmarks").find({maths_marks:{$gt:50},english_marks:{$gt:50}}).toArray(function(err, result) {
8        if (err) throw err;
9        console.log(result);
10       db.close();
11     });
12   });
13
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu18.js
(node:14662) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
[ { _id: 5c3eb7b3581db2f654ce1403,
    name: 'Mala',
    maths_marks: 62,
    english_marks: 53,
    science_marks: 72,
    average: 1,
    Average: '' },
  { _id: 5c3eb7fd581db2f654ce1404,
    name: 'Vanu',
    maths_marks: 80,
    english_marks: 75,
    science_marks: 85,
    average: 1,
    Average: '' },
  { _id: 5c3eb943581db2f654ce1408,
    name: 'Shayu',
    maths_marks: 80,
    english_marks: 76,
    science_marks: 65,
    average: 1,
```

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

```
qu19.js                          ×

1  var MongoClient = require('mongodb').MongoClient;
2  var url = "mongodb://localhost:27017/student";
3
4  MongoClient.connect(url, function(err, db) {
5    if (err) throw err;
6    var dbo = db.db("student");
7    dbo.collection("studentmarks").find({$and:[{maths_marks:{$lt:50},english_marks:{$gt:50}}]}).toArray(function(err, result) {
8      if (err) throw err;
9      console.log(result);
10     db.close();
11   });
12 });
13
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu19.js
(node:15034) DeprecationWarning: current URL string parser is deprecated, and wi
ll be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
[ { _id: 5c52c78a6843aa313e1f86ac,
    name: 'Mala',
    maths_marks: 45,
    english_marks: 53,
    science_marks: 72,
    Average: '' },
  { _id: 5c52c78a6843aa313e1f86b1,
    name: 'Kumaran',
    maths_marks: 32,
    english_marks: 73,
    science_marks: 84,
    Average: '' },
  { _id: 5c52c78a6843aa313e1f86b4,
    name: 'Raam',
    maths_marks: 41,
    english_marks: 65,
    science_marks: 88,
    Average: '' },
  { _id: 5c52c7e3f1060a327ca857c7,
```

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

```
qu19.js          ×    qu20.js          ×
1  var MongoClient = require('mongodb').MongoClient;
2  var url = "mongodb://localhost:27017/student";
3
4  MongoClient.connect(url, function(err, db) {
5    if (err) throw err;
6    var dbo = db.db("student");
7    dbo.collection("studentmarks").find({$and:[{maths_marks:{$lt:50},science_marks:{$lt:50}}]}).toArray(function(err, result) {
8      if (err) throw err;
9      console.log(result);
10     db.close();
11   });
12 });
13
```

11) Remove Science column/field for Raam

```
qu21.js                    ×

1   var MongoClient = require('mongodb').MongoClient;
2   var url = "mongodb://127.0.0.1:27017/student";
3
4   MongoClient.connect(url, function(err, db) {
5     if (err) throw err;
6     var dbo = db.db("student");
7     var myquery = { name: "Raam" };
8     var newvalues = { $unset: {science_marks:75 } };
9     dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
10      if (err) throw err;
11      console.log("changed");
12      db.close();
13    });
14  });
15
```

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

```
qu21.js  ✕    qu22.js  ✕
 1   var MongoClient = require('mongodb').MongoClient;
 2   var url = "mongodb://localhost:27017/student";
 3
 4   MongoClient.connect(url, function(err, db) {
 5     if (err) throw err;
 6     var dbo = db.db("student");
 7     var myobj = [
 8       { name: 'John', maths_marks:87, english_marks:23}
 9     ];
10     dbo.collection("studenmarks").insertMany(myobj, function(err, res) {
11       if (err) throw err;
12       console.log("Number of documents changed: " + res.insertedCount);
13       db.close();
14     });
15   });
16
```
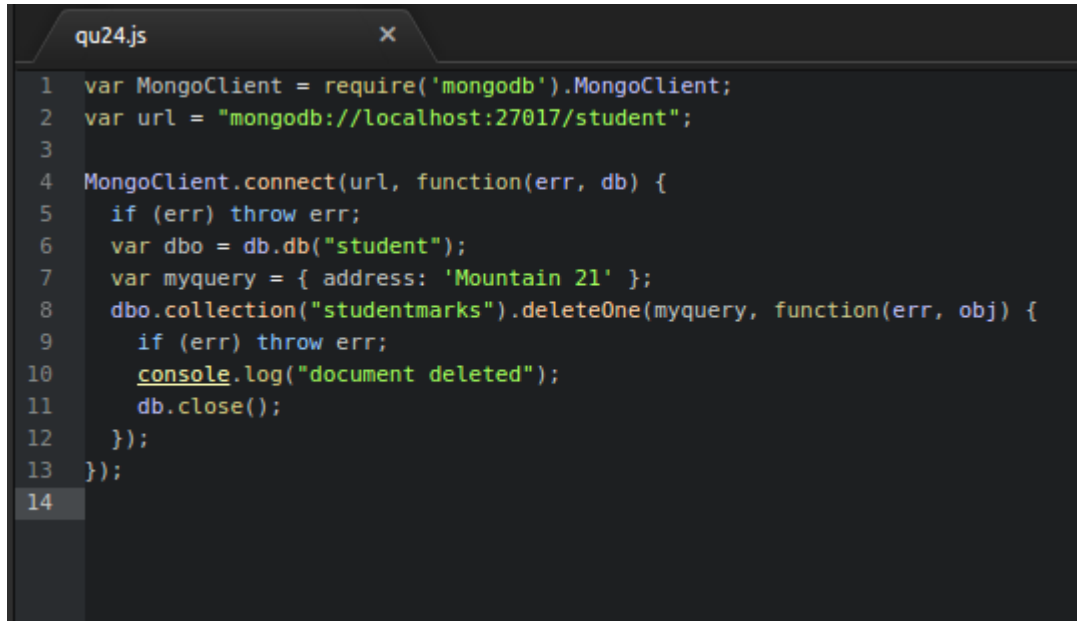
```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu22.js
(node:4988) DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option { useNewUrl
Parser: true } to MongoClient.connect.
Number of documents changed: 1
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ █
```

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

```
qu23.js  ✕
 1   var MongoClient = require('mongodb').MongoClient;
 2   var url = "mongodb://127.0.0.1:27017/student";
 3
 4   MongoClient.connect(url, function(err, db) {
 5     if (err) throw err;
 6     var dbo = db.db("student");
 7     var myquery = { name:"John" };
 8     var newvalues = { $rename: {english_marks: "science_marks"} };
 9     dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
10       if (err) throw err;
11       console.log("document updated");
12       db.close();
13     });
14   });
15
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu23.js
(node:5188) DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option { useNewUrl
Parser: true } to MongoClient.connect.
document updated
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

14) Remove Kumaran's document from collection

```
qu24.js                        ×

1    var MongoClient = require('mongodb').MongoClient;
2    var url = "mongodb://localhost:27017/student";
3
4    MongoClient.connect(url, function(err, db) {
5      if (err) throw err;
6      var dbo = db.db("student");
7      var myquery = { address: 'Mountain 21' };
8      dbo.collection("studentmarks").deleteOne(myquery, function(err, obj) {
9        if (err) throw err;
10       console.log("document deleted");
11       db.close();
12     });
13   });
14
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu24.js
(node:5327) DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option { useNewUrl
Parser: true } to MongoClient.connect.
document deleted
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$
```

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

```
     qu24.js          ×    qu25.js              ×
1    var MongoClient = require('mongodb').MongoClient;
2    var url = "mongodb://localhost:27017/student";
3
4    MongoClient.connect(url, function(err, db) {
5      if (err) throw err;
6      var dbo = db.db("student");
7            dbo.collection("studentmarks").find({$or:[{name:"Aruli"},{name: "Kala"}]},{maths_marks:1, science_marks:1}).toArray(function(err, result) {
8        if (err) throw err;
9        console.log(result);
10       db.close();
11     });
12   });
13
```

```
ukistu04@ukipc04:~/Documents/uki4/programming/Nodejs mongodb$ node qu25.js
(node:5469) DeprecationWarning: current URL string parser is deprecated, and wil
l be removed in a future version. To use the new parser, pass option { useNewUrl
Parser: true } to MongoClient.connect.
[ { _id: 5c3eb83f581db2f654ce1405,
    name: 'Kala',
    maths_marks: 32,
    english_marks: 46,
    science_marks: 53,
    average: 1,
    Average: '' },
  { _id: 5c3ebb18581db2f654ce140d,
    name: 'Aruli',
    maths_marks: 78,
    english_marks: 85,
    science_marks: 80,
    average: 1,
    Average: '' },
  { _id: 5c52c78a6843aa313e1f86ae,
    name: 'Kala',
    maths_marks: 32,
    english_marks: 46,
    science_marks: 53,
    Average: '' },
```