Nodemongodb Exercises 2

1) Create a Database called student
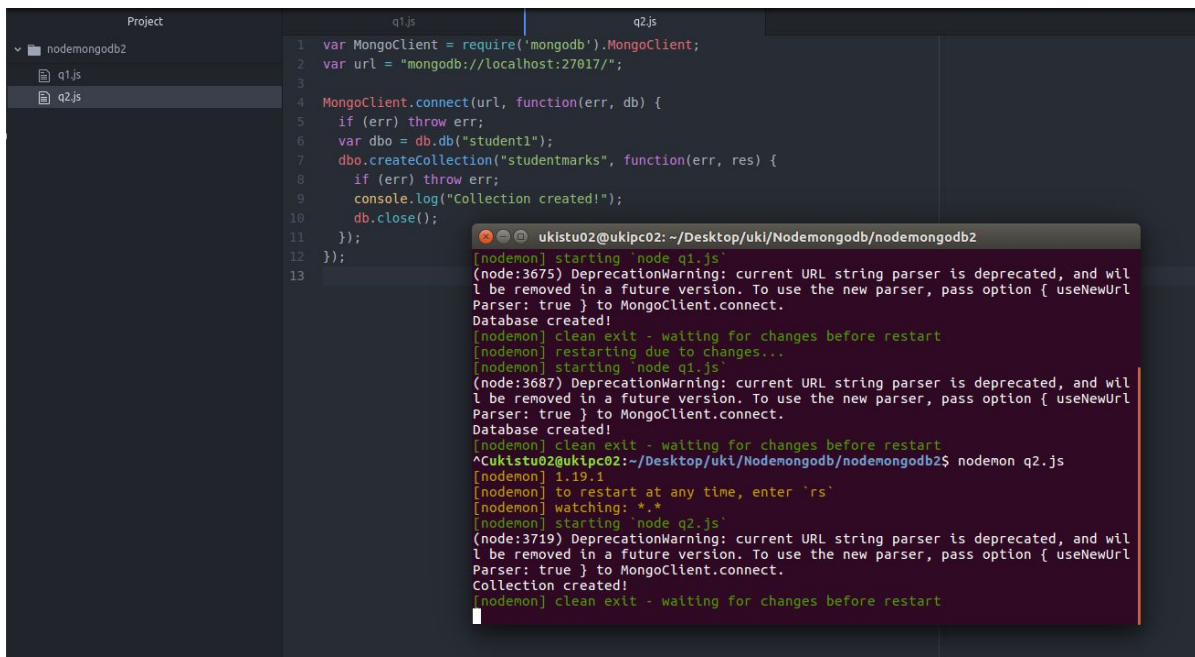

2) Create a collection called student marks

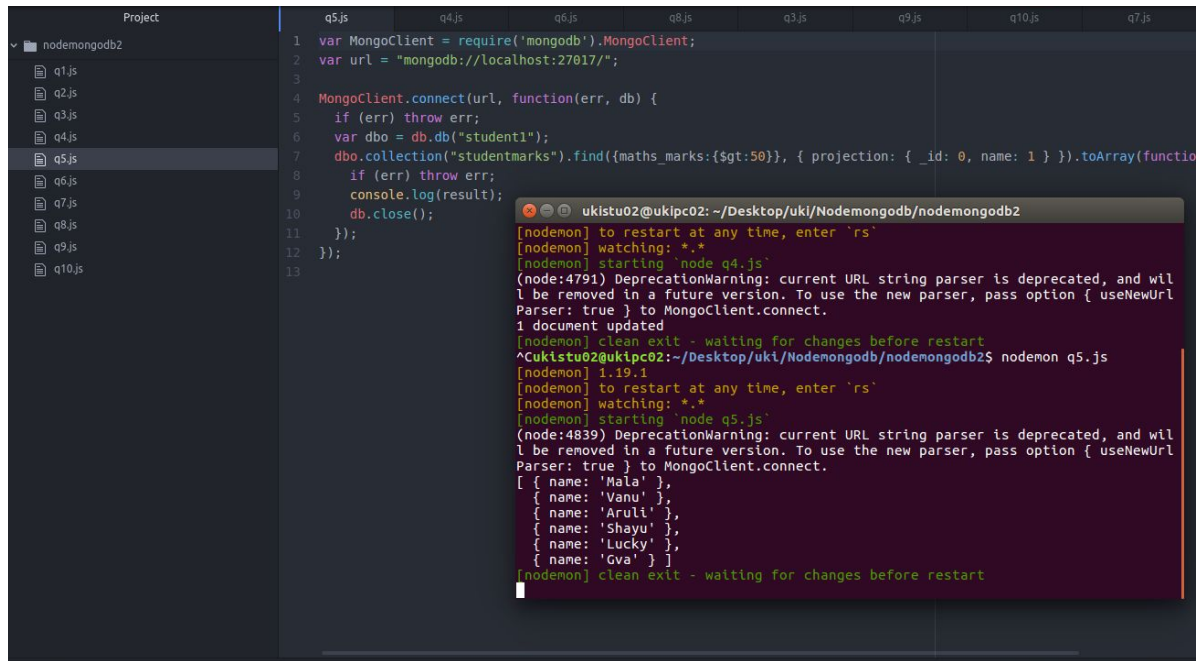## 3) Create the documents listed in above table.

```
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("student1");
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: 'Raam', maths_marks:41, english_marks:65, science_marks:88},
17
18
19
20    ];
21    dbo.collection("studentmarks").insertMany(myobj, function(err, res) {
22      if (err) throw err;
23      console.log("Number of documents inserted: " + res.insertedCount);
24      db.close();
25    });
26  });
27
```

4) Increase the maths marks of Mala by 6 marks


```
1   var MongoClient = require('mongodb').MongoClient;
2   var url = "mongodb://127.0.0.1:27017/";
3
4   MongoClient.connect(url, function(err, db) {
5     if (err) throw err;
6     var dbo = db.db("student1");
7     var myquery = { name: "Mala" };
8     var newvalues = { $inc: {maths_marks: 6} };
9     dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
10      if (err) throw err;
11      console.log("1 document updated");
12      db.close();
13    });
14  });
15
```

```
ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
ukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q3.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q3.js`
(node:4732) 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 inserted: 9
[nodemon] clean exit - waiting for changes before restart
^C^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q4.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q4.js`
(node:4791) 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.
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.
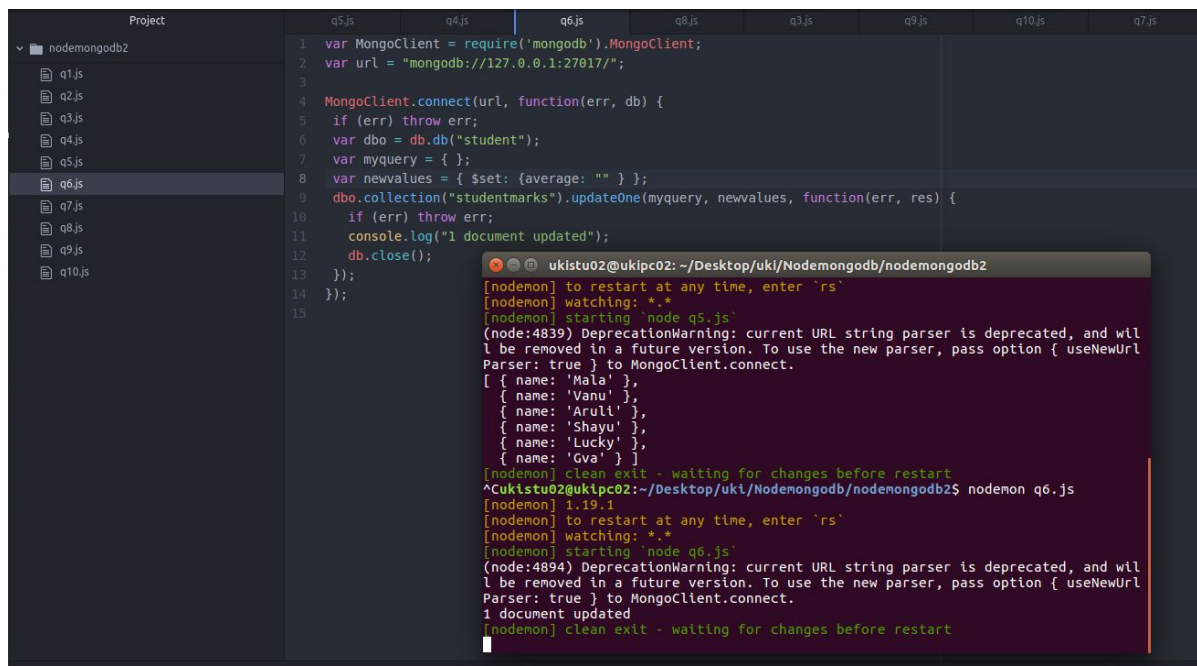
6)Add a new column(field) for Average for all students.

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("student1");
  dbo.collection("studentmarks").find({maths_marks:{$gt:50}}, { projection: { _id: 0, name: 1 } }).toArray(functio
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q4.js`
(node:4791) 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.
1 document updated
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q5.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q5.js`
(node:4839) 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.
[ { name: 'Mala' },
  { name: 'Vanu' },
  { name: 'Aruli' },
  { name: 'Shayu' },
  { name: 'Lucky' },
  { name: 'Gva' } ]
[nodemon] clean exit - waiting for changes before restart
```



```
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();
  });
});
```

```
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q5.js`
(node:4839) 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.
[ { name: 'Mala' },
  { name: 'Vanu' },
  { name: 'Aruli' },
  { name: 'Shayu' },
  { name: 'Lucky' },
  { name: 'Gva' } ]
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q6.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q6.js`
(node:4894) 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.
1 document updated
[nodemon] clean exit - waiting for changes before restart
```

7) Update Marks_Science=75 to Lucky .

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

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

```
Project                q9.js                    q10.js
∨ ■ nodemong    1   var MongoClient = require('mongodb').MongoClient;
  ▤ q1.js       2   var url = "mongodb://localhost:27017/";
  ▤ q2.js       3
  ▤ q3.js       4   MongoClient.connect(url, function(err, db) {
  ▤ q4.js       5     if (err) throw err;
  ▤ q5.js       6     var dbo = db.db("student1");
  ▤ q6.js       7     dbo.collection("studentmarks").find({$and:[{maths_marks:{$lt:50}},{english_marks:{$gt:50}}]}, { projection: { _id: 0, name: 1 } }).toArr
  ▤ q7.js       8       if (err) throw err;
  ▤ q8.js       9       console.log(result);
  ▤ q9.js      10       db.close();
  ▤ q10.js     11     });
               12   });
               13
```

```
ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
[nodemon] clean exit - waiting for changes before restart
[nodemon] restarting due to changes...
[nodemon] starting `node q8.js`
(node:5127) 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.
[ { name: 'Mala' },
  { name: 'Vanu' },
  { name: 'Aruli' },
  { name: 'Shayu' },
  { name: 'Lucky' },
  { name: 'Gva' } ]
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q9.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q9.js`
(node:5158) 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.
[ { name: 'Kumaran' }, { name: 'Raam' } ]
[nodemon] clean exit - waiting for changes before restart
```

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


```
Project                q9.js                    q10.js
∨ ■ nodemong    1   var MongoClient = require('mongodb').MongoClient;
  ▤ q1.js       2   var url = "mongodb://localhost:27017/";
  ▤ q2.js       3
  ▤ q3.js       4   MongoClient.connect(url, function(err, db) {
  ▤ q4.js       5     if (err) throw err;
  ▤ q5.js       6     var dbo = db.db("student1");
  ▤ q6.js       7     dbo.collection("studentmarks").find({$and:[{maths_marks:{$lt:40}},{science_marks:{$lt:40}}]}, { projection: { _id: 0, name: 1 } }).toArr
  ▤ q7.js       8       if (err) throw err;
  ▤ q8.js       9       console.log(result);
  ▤ q9.js      10       db.close();
  ▤ q10.js     11     });
               12   });
               13
```

```
ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
[nodemon] starting `node q9.js`
(node:5158) 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.
[ { name: 'Kumaran' }, { name: 'Raam' } ]
[nodemon] clean exit - waiting for changes before restart
[nodemon] restarting due to changes...
[nodemon] starting `node q9.js`
(node:5251) 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.
[ { name: 'Kumaran' }, { name: 'Raam' } ]
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q10.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q10.js`
(node:5295) 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.
[]
[nodemon] clean exit - waiting for changes before restart
```

11) Remove Science column/field for Raam

```
Project                    q9.js              q10.js              q11.js
v  nodemong    1   var MongoClient = require('mongodb').MongoClient;
              2   var url = "mongodb://127.0.0.1:27017/";
   q1.js       3
   q2.js       4   MongoClient.connect(url, function(err, db) {
   q3.js       5     if (err) throw err;
   q4.js       6     var dbo = db.db("student1");
   q5.js       7     var myquery = {name: 'Raam' };
   q6.js       8     var newvalues = {$unset:{science_marks:88}};
   q7.js       9     dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
   q8.js      10       if (err) throw err;
   q9.js      11       console.log("1 document removed");
   q10.js     12       db.close();
   q11.js     13     });
             14   });
             15
```

ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
```
[nodemon] starting `node q11.js`
(node:5472) 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.
1 document updated
[nodemon] clean exit - waiting for changes before restart
[nodemon] restarting due to changes...
[nodemon] starting `node q11.js`
(node:5520) 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.
1 document removed
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q11.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q11.js`
(node:5546) 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.
1 document removed
[nodemon] clean exit - waiting for changes before restart
```

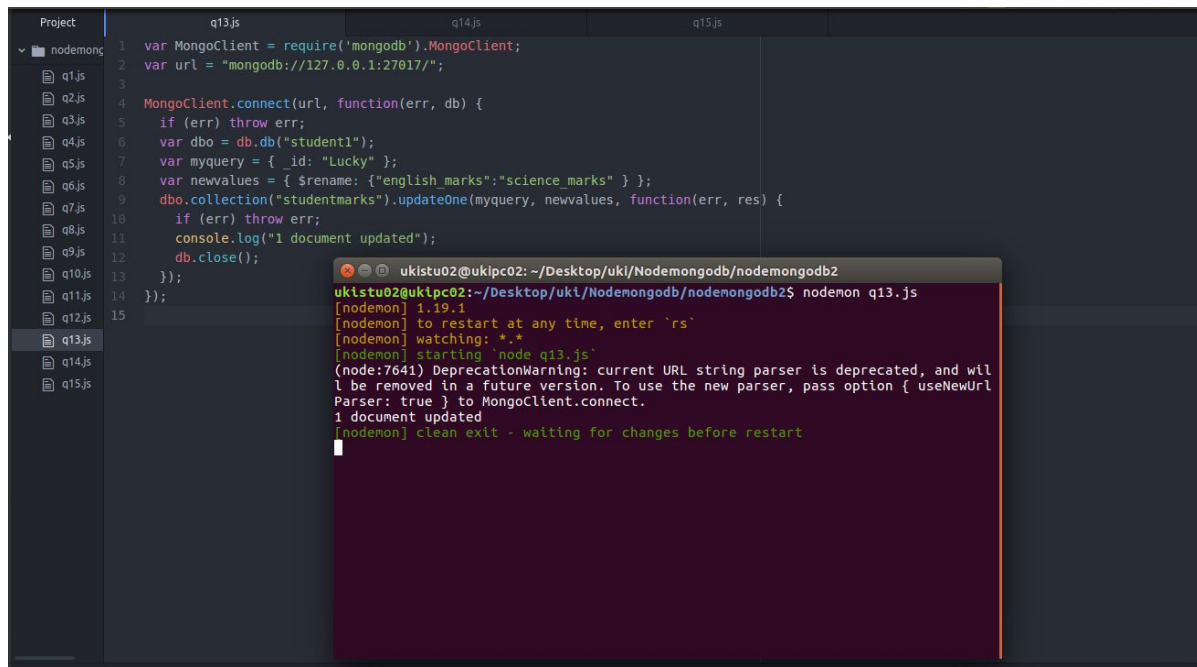12) Update John's Math mark as 87 and English mark as 23, if john not available upsert.

```
Project              q9.js           q10.js           q11.js              q12.js
v  nodemong    1   var MongoClient = require('mongodb').MongoClient;
              2   var url = "mongodb://localhost:27017/";
   q1.js       3
   q2.js       4   MongoClient.connect(url, function(err, db) {
   q3.js       5     if (err) throw err;
   q4.js       6     var dbo = db.db("student1");
   q5.js       7     var myobj = { name: "John", maths_marks: 87, english_marks:23  };
   q6.js       8     dbo.collection("studentmarks").insertOne(myobj,{upsert: true, safe: false}, function(err, res) {
   q7.js       9       if (err) throw err;
   q8.js      10       console.log("1 document upserted");
   q9.js      11       db.close();
   q10.js     12     });
   q11.js     13   });
   q12.js     14
```

ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
```
[nodemon] starting `node q11.js`
(node:5704) 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.
1 document removed
[nodemon] clean exit - waiting for changes before restart
[nodemon] restarting due to changes...
[nodemon] starting `node q11.js`
(node:5713) 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.
1 document removed
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q12.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q12.js`
(node:5739) 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.
1 document upserted
[nodemon] clean exit - waiting for changes before restart
```

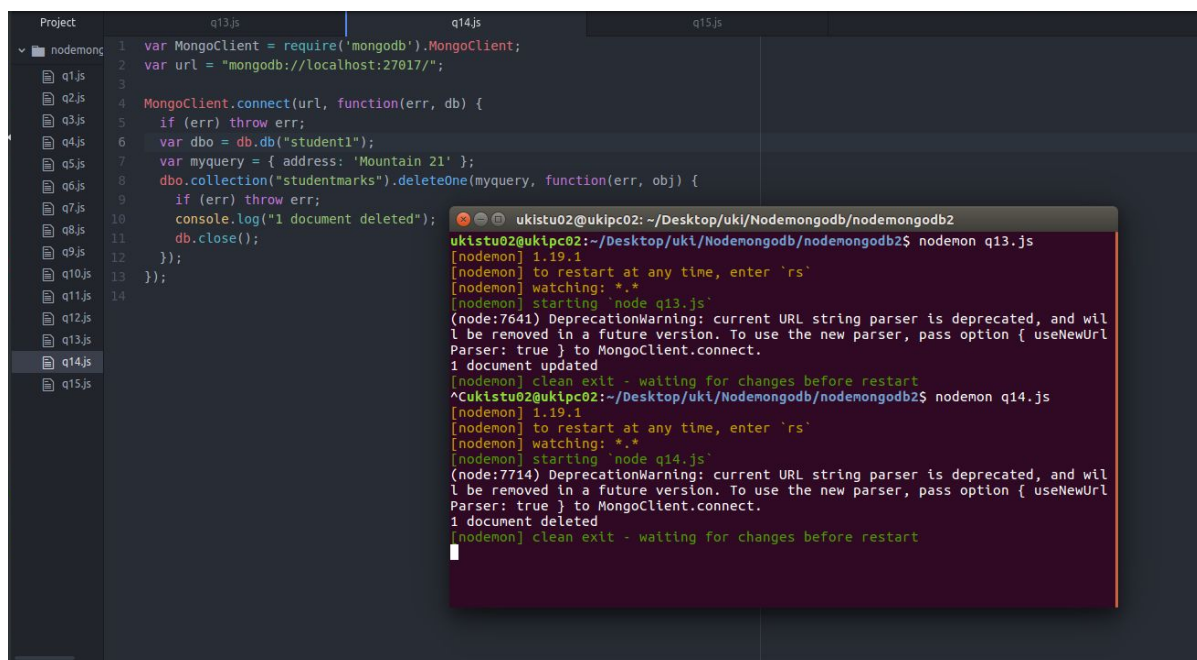## 13) Rename the english_marks column/field for John to science_marks

```js
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("student1");
  var myquery = { _id: "Lucky" };
  var newvalues = { $rename: {"english_marks":"science_marks" } };
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log("1 document updated");
    db.close();
  });
});
```

```
ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
ukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q13.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q13.js`
(node:7641) 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.
1 document updated
[nodemon] clean exit - waiting for changes before restart
```

14) Remove Kumaran's document from collection

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("student1");
  var myquery = { address: 'Mountain 21' };
  dbo.collection("studentmarks").deleteOne(myquery, function(err, obj) {
    if (err) throw err;
    console.log("1 document deleted");
    db.close();
  });
});
```

```
ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
ukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q13.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q13.js`
(node:7641) 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.
1 document updated
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q14.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q14.js`
(node:7714) 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.
1 document deleted
[nodemon] clean exit - waiting for changes before restart
```

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

```
Project          q13.js              q14.js              q15.js
v  nodemong    1  var MongoClient = require('mongodb').MongoClient;
  q1.js        2  var url = "mongodb://localhost:27017/";
  q2.js        3
  q3.js        4  MongoClient.connect(url, function(err, db) {
  q4.js        5    if (err) throw err;
  q5.js        6    var dbo = db.db("student1");
  q6.js        7    dbo.collection("studentmarks").find({$or:[{name:"Aruli"},{name:"Kala"}]}, { projection: { _id: 0, name: 1 ,maths_marks:1,science_marks:1
  q7.js        8      if (err) throw err;
  q8.js        9      console.log(result);
  q9.js       10      db.close();
  q10.js      11    });
  q11.js      12  });
  q12.js      13
  q13.js
  q14.js
  q15.js
```

```
ukistu02@ukipc02: ~/Desktop/uki/Nodemongodb/nodemongodb2
[nodemon] starting `node q14.js`
(node:7714) 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.
1 document deleted
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q15.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q15.js`
[nodemon] clean exit - waiting for changes before restart
^Cukistu02@ukipc02:~/Desktop/uki/Nodemongodb/nodemongodb2$ nodemon q15.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node q15.js`
(node:7852) 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.
[ { name: 'Kala', maths_marks: 32, science_marks: 53 },
  { name: 'Aruli', maths_marks: 78, science_marks: 80 } ]
[nodemon] clean exit - waiting for changes before restart
```