1) Create a Database called student

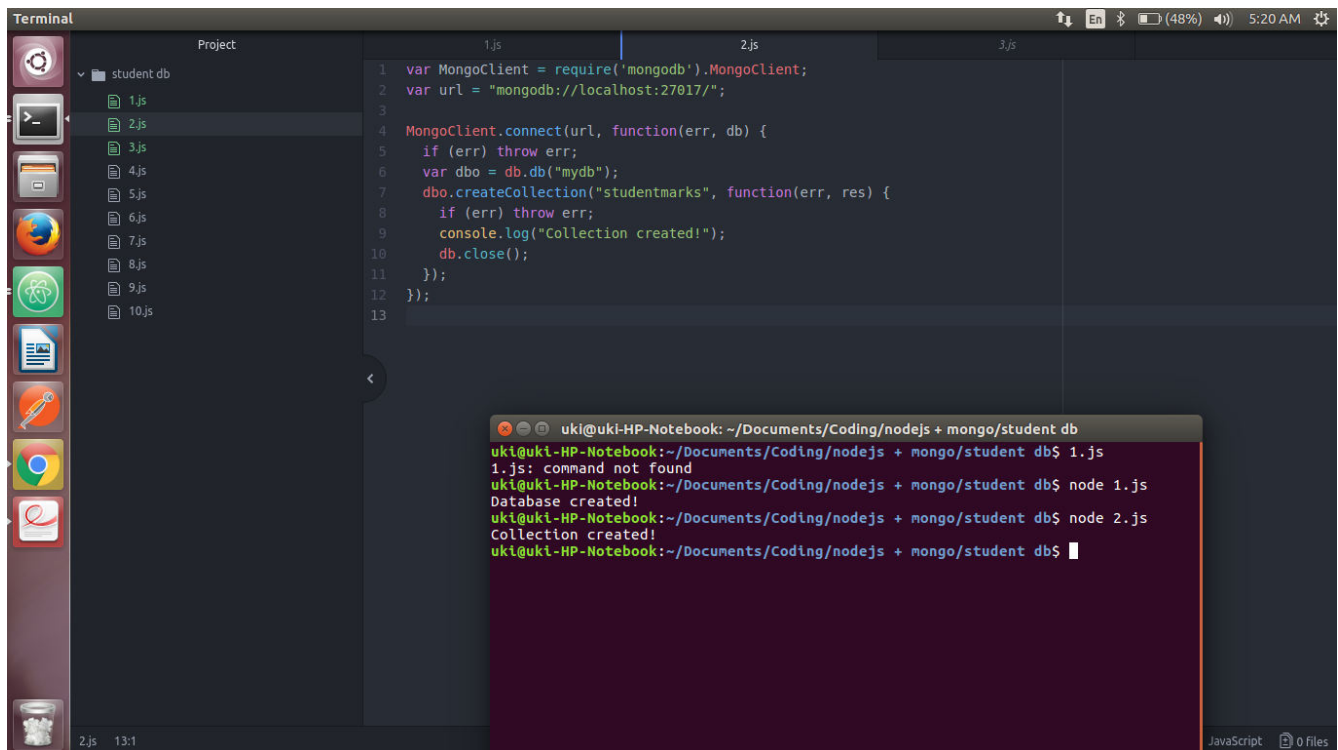

```javascript
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/student";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;

  console.log("Database created!");
  db.close();
});
```

```
uki@uki-HP-Notebook: ~/Documents/Coding/nodejs + mongo/student db
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ 1.js
1.js: command not found
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 1.js
Database created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 2.js
Collection created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$
```
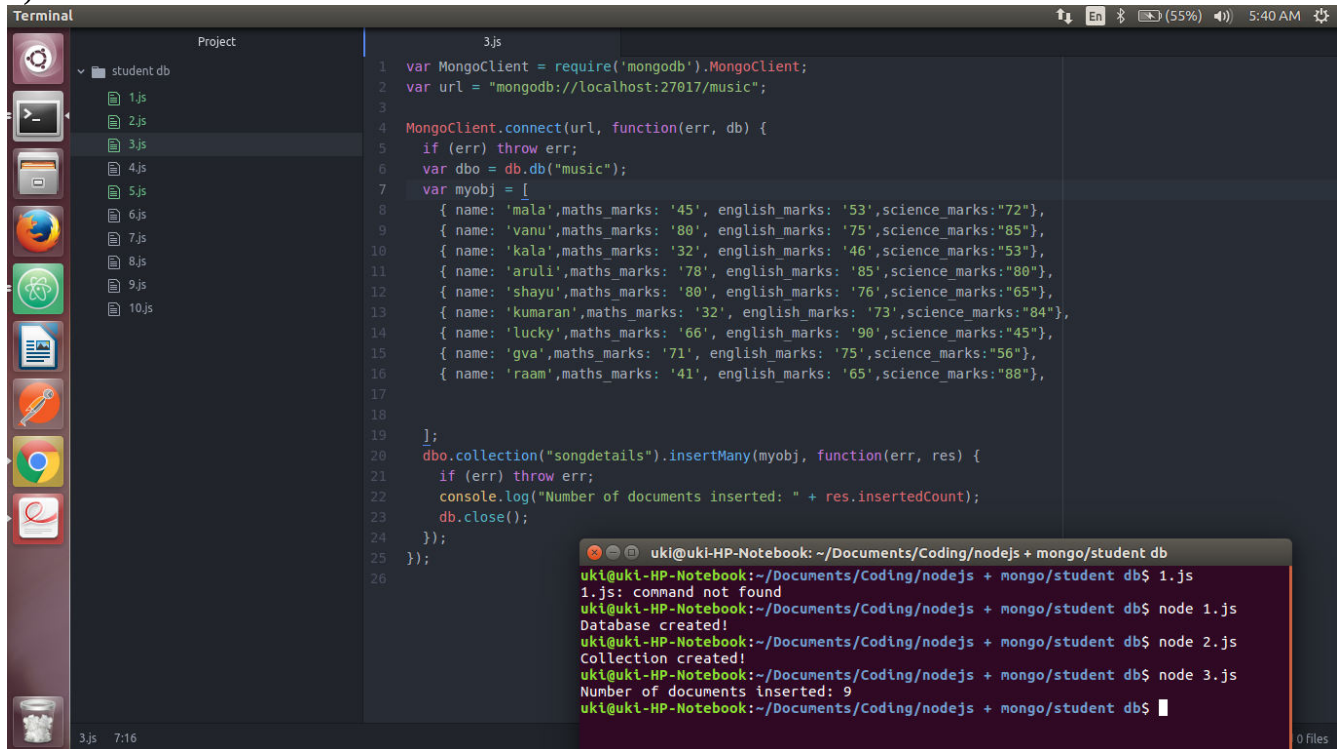
2) Create a collection called studentmarks


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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.createCollection("studentmarks", function(err, res) {
    if (err) throw err;
    console.log("Collection created!");
    db.close();
  });
});
```

```
uki@uki-HP-Notebook: ~/Documents/Coding/nodejs + mongo/student db
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ 1.js
1.js: command not found
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 1.js
Database created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 2.js
Collection created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$
```

3) Create the documents listed in above table.

```
Project                          3.js
student db                  1   var MongoClient = require('mongodb').MongoClient;
  1.js                      2   var url = "mongodb://localhost:27017/music";
  2.js                      3
  3.js                      4   MongoClient.connect(url, function(err, db) {
  4.js                      5     if (err) throw err;
  5.js                      6     var dbo = db.db("music");
  6.js                      7     var myobj = [
  7.js                      8       { name: 'mala',maths_marks: '45', english_marks: '53',science_marks:"72"},
  8.js                      9       { name: 'vanu',maths_marks: '80', english_marks: '75',science_marks:"85"},
  9.js                     10       { name: 'kala',maths_marks: '32', english_marks: '46',science_marks:"53"},
  10.js                    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     dbo.collection("songdetails").insertMany(myobj, function(err, res) {
                          21       if (err) throw err;
                          22       console.log("Number of documents inserted: " + res.insertedCount);
                          23       db.close();
                          24     });
                          25   });
                          26
```
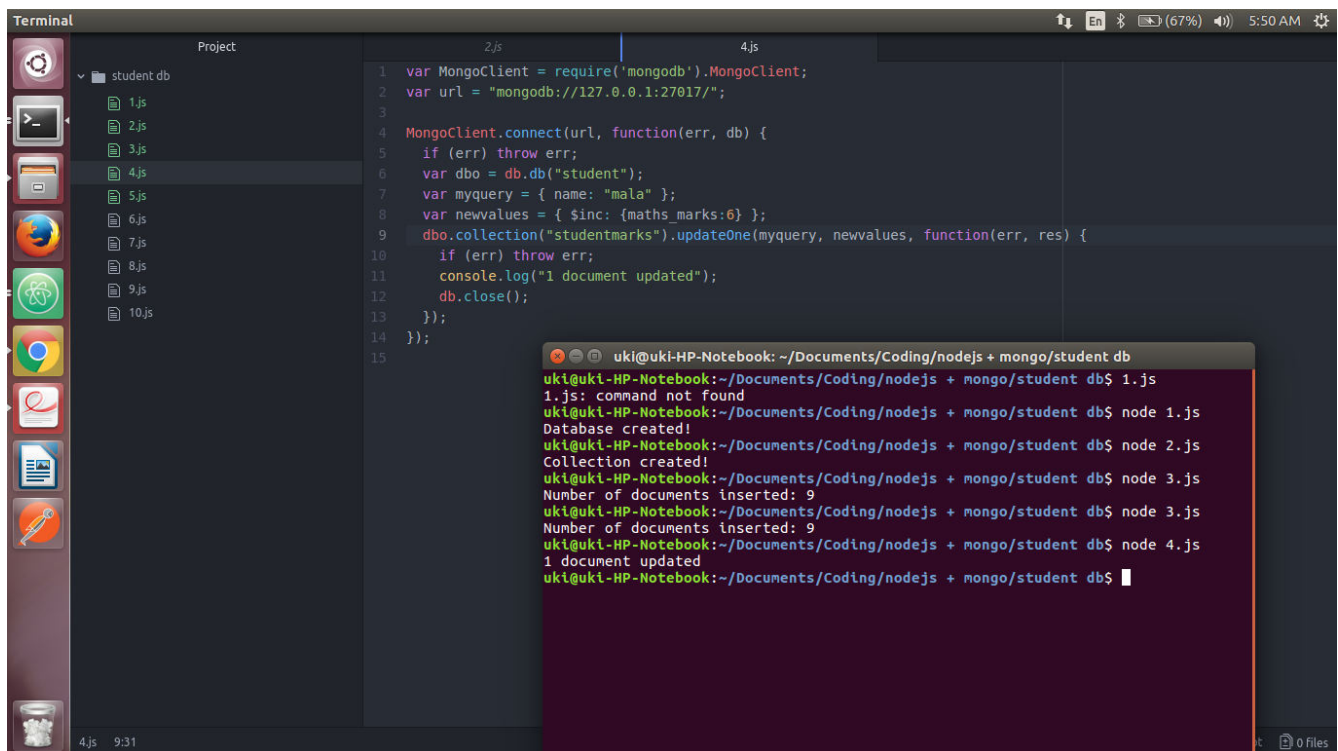
```
uki@uki-HP-Notebook: ~/Documents/Coding/nodejs + mongo/student db
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ 1.js
1.js: command not found
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 1.js
Database created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 2.js
Collection created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 3.js
Number of documents inserted: 9
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$
```
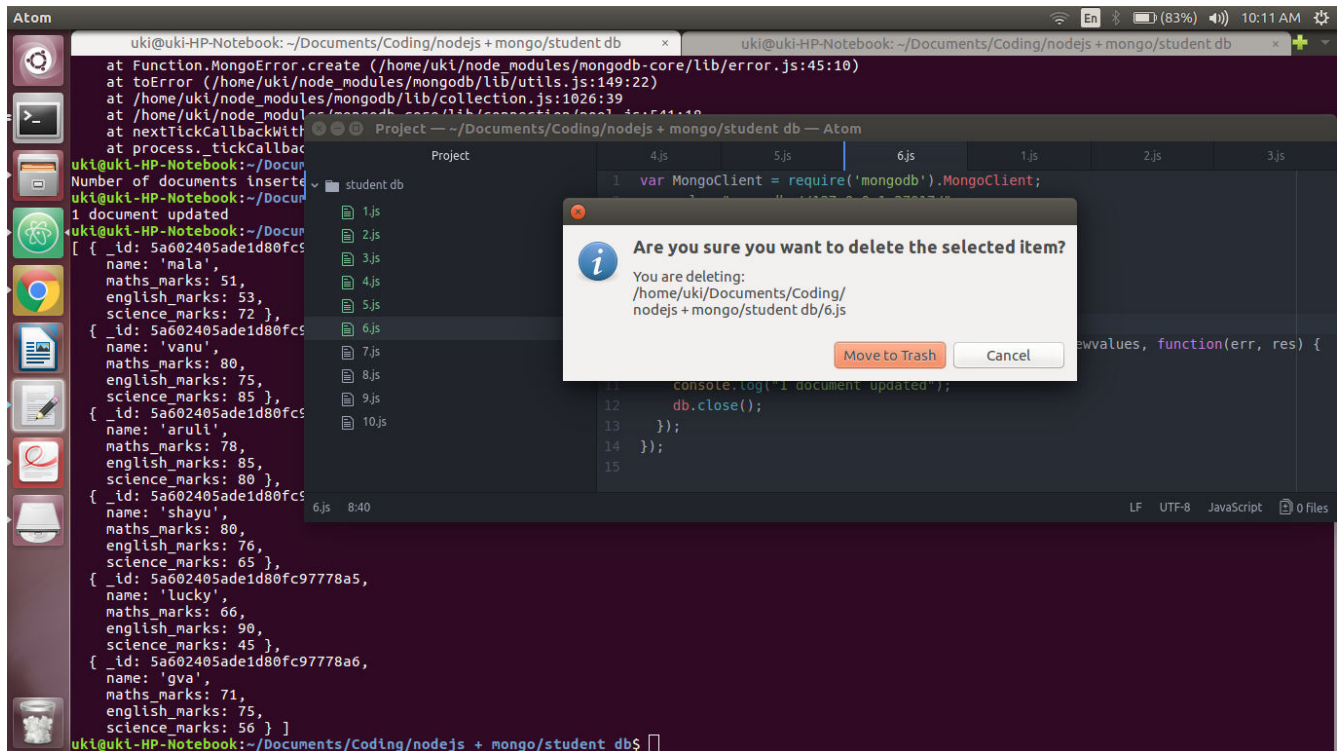
4) Increase the maths marks of Mala by 6 marks

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

```
uki@uki-HP-Notebook: ~/Documents/Coding/nodejs + mongo/student db
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ 1.js
1.js: command not found
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 1.js
Database created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 2.js
Collection created!
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 3.js
Number of documents inserted: 9
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 3.js
Number of documents inserted: 9
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 4.js
1 document updated
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$
```

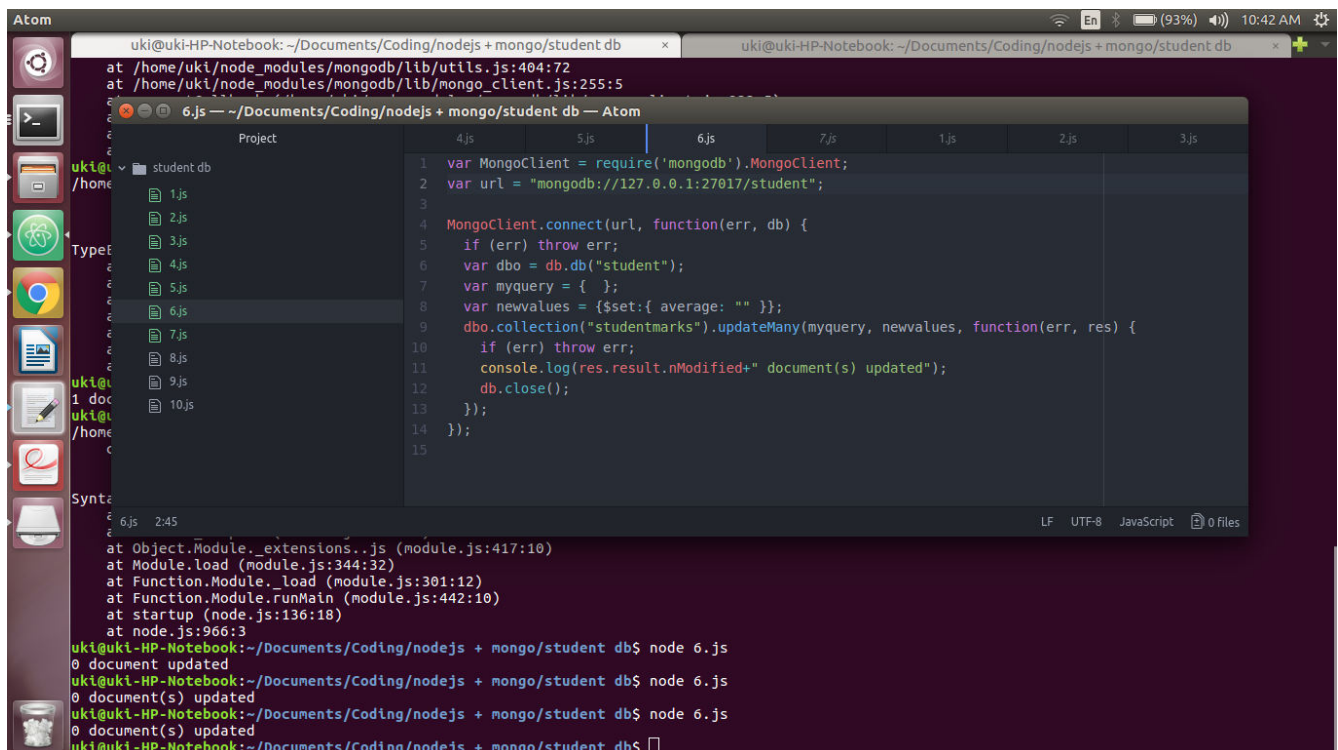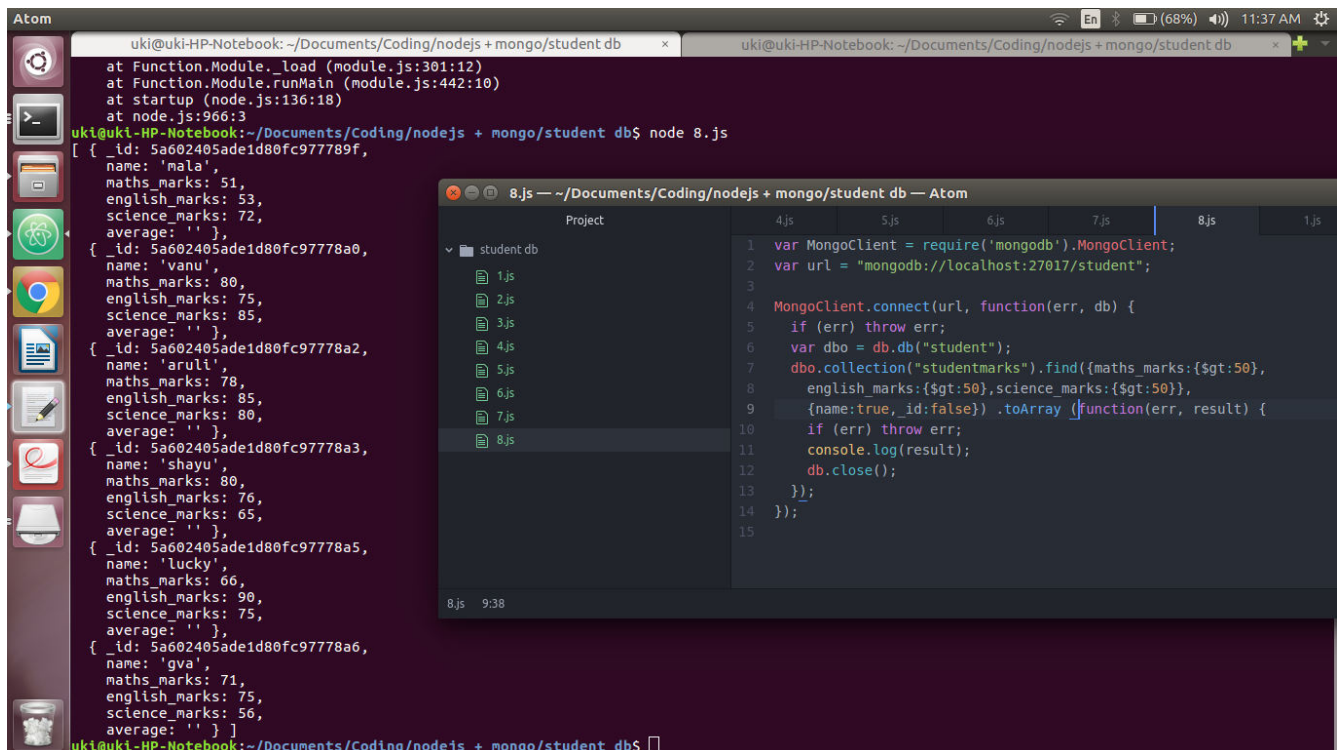5) List the names of students who got more than 50 marks in Maths Subject.

6)Add a new column(field) for Average for all students.
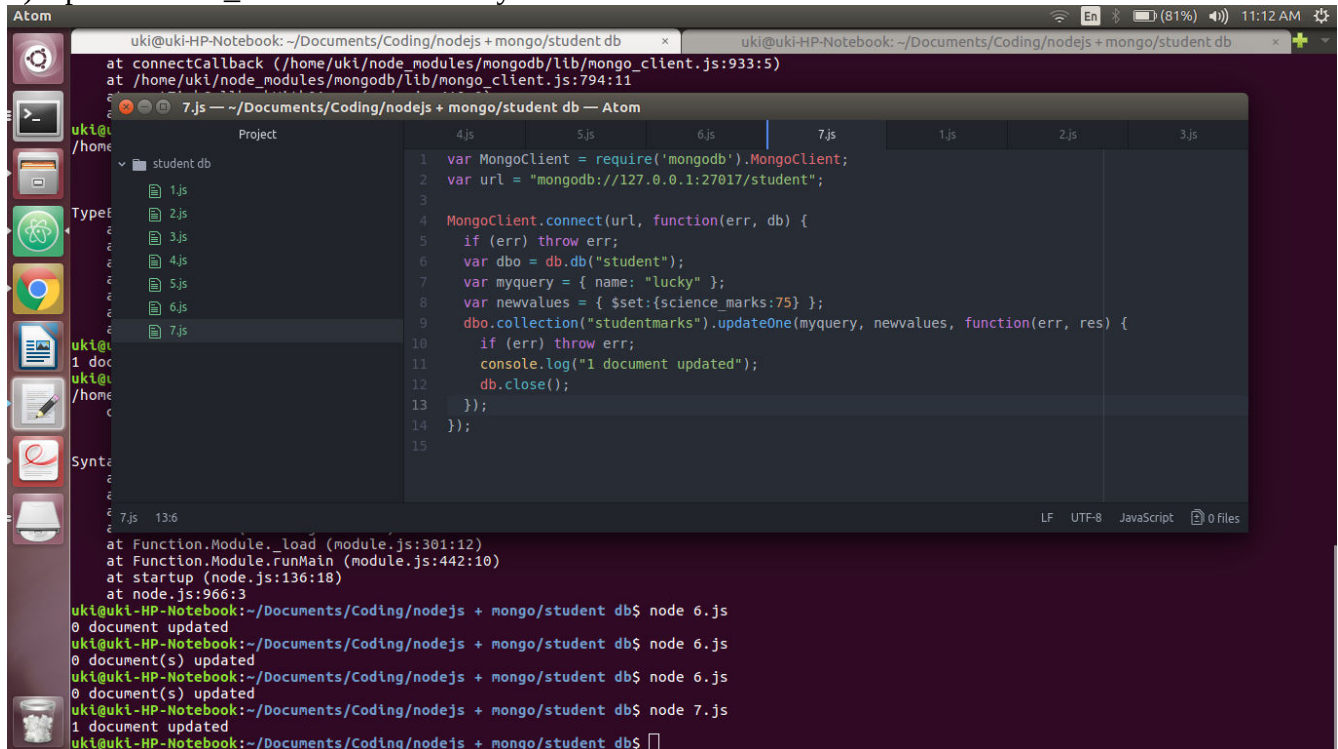
7) Update Marks_Science=75 to Lucky .

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

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

11) Remove Science column/field for Raam

```
SyntaxError: Unexpected token ,
    at exports.runInThisContext (vm.js:53:16)
    at Module._compile (module.js:374:25)
    at Object.Module._extensions..js (module.js:417:10)
    at Module.load (module.js:344:32)
    at Function.Module._load (module.js:301:12)
    at Function.Module.runMain (module.js:442:10)
    at startup (node.js:136:18)
    at node.js:966:3
```
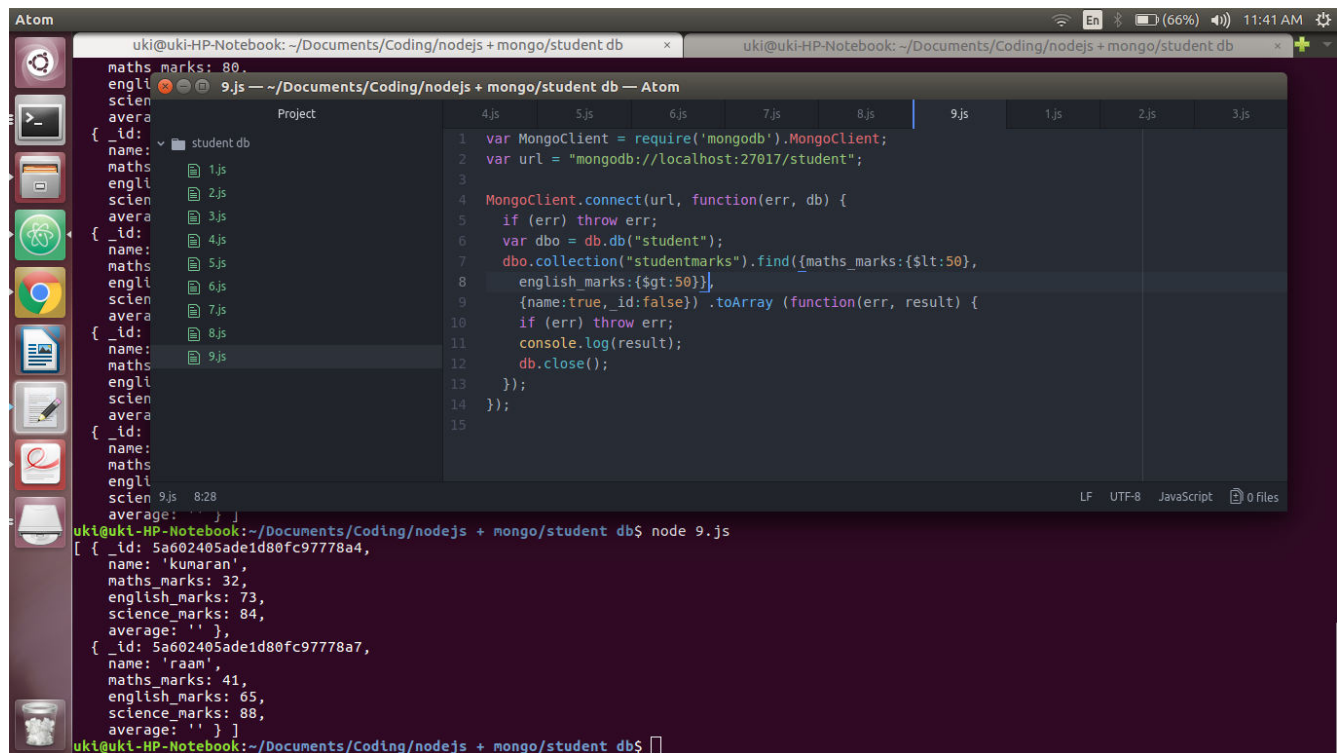
```javascript
1  var MongoClient = require('mongodb').MongoClient;
2  var url = "mongodb://localhost:27017/student";
3
4  MongoClient.connect(url, function(err, db) {
5    if (err) throw err;
6    var dbo = db.db("student");
7    dbo.collection("studentmarks").find({maths_marks:{$lt:40},
8    ,science_marks:{$lt:40}},
9      {name:true,_id:false}) .toArray (function(err, result) {
10     if (err) throw err;
11     console.log(result);
12     db.close();
13   });
14 });
15
```

```
    at startup (node.js:136:18)
    at node.js:966:3
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 10.js
[ ]
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$
```

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


```
    at Module._compile (module.js:374:25)
    at Object.Module._extensions..js (module.js:417:10)
    at Module.load (module.js:344:32)
    at Function.Module._load (module.js:301:12)
    at Function.Module.runMain (module.js:442:10)
    at startup (node.js:136:18)
    at node.js:966:3
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 10.js
/home/uki/Documents/Coding/nodejs + mongo/student db/10.js:8
    ,science_marks:{$lt:40}},
```

```javascript
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 = {name: "john",maths_marks: 87,eng_marks: 27 };
8
9
10   dbo.collection("studentmarks").insertOne(myobj, function(err, res) {
11     if (err) throw err;
12     console.log("1 document inserted");
13     db.close();
14   });
15 });
16
```

```
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 11.js
1 document updated
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 12.js
1 document inserted
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$
```

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

14) Remove Kumaran's document from collection


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

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

```javascript
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://127.0.0.1:27017/student";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("student");
  var myquery = {name: "john" };
  var newvalues = {$rename: {eng_marks: "sci_marks"}};
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log("1 document updated");
    db.close();
  });
});
```

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

uki@uki-HP-Notebook: ~/Documents/Coding/nodejs + mongo/student db ☒   uki@uki-HP-Notebook: ~/Documents/Coding/nodejs + mongo/student db

Project — ~/Documents/Coding/nodejs + mongo/student db — Atom

Project | 4.js 5.js 6.js 7.js 8.js 9.js 10.js ● *14.js* 1.js 2.js

```
student db
   1.js
   2.js
   3.js
   4.js
   5.js
   6.js
   7.js
   8.js
   9.js
   10.js
   11.js
   12.js
   13.js
   14.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 = {name: 'kumaran' };
    dbo.collection("studentmarks").deleteOne(myquery, function(err, obj) {
      if (err) throw err;
10      console.log("1 document deleted");
11      db.close();
12    });
13  });
14
```

14.js 1:1   LF UTF-8 JavaScript 📄 0 files

```
at Function.Module._load (module.js:301:12)
at sta
at Fun
at nod
uki@uki-HP
/home/uki/
  ,science
    ^

SyntaxErro
at exp
at Mod
at Obj
at Mod
at Fun
at Fun
at sta
at nod
uki@uki-HP
[]
uki@uki-HP
1 document
uki@uki-HP
1 document
uki@uki-HP
1 document
uki@uki-HP
1 document deleted
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$ node 15.js
[ { _id: 5a602405ade1d80fc97778a1,
    name: 'kala',
    maths_marks: 32,
    english_marks: 46,
    science_marks: 53,
    average: '' },
  { _id: 5a602405ade1d80fc97778a2,
    name: 'aruli',
    maths_marks: 78,
    english_marks: 85,
    science_marks: 80,
    average: '' } ]
uki@uki-HP-Notebook:~/Documents/Coding/nodejs + mongo/student db$
```