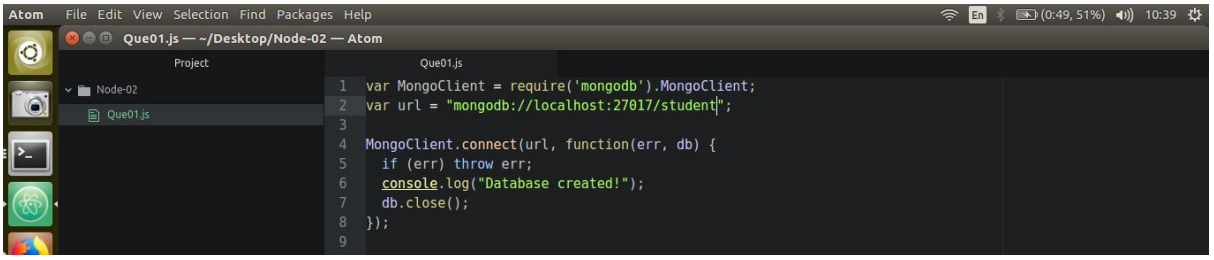
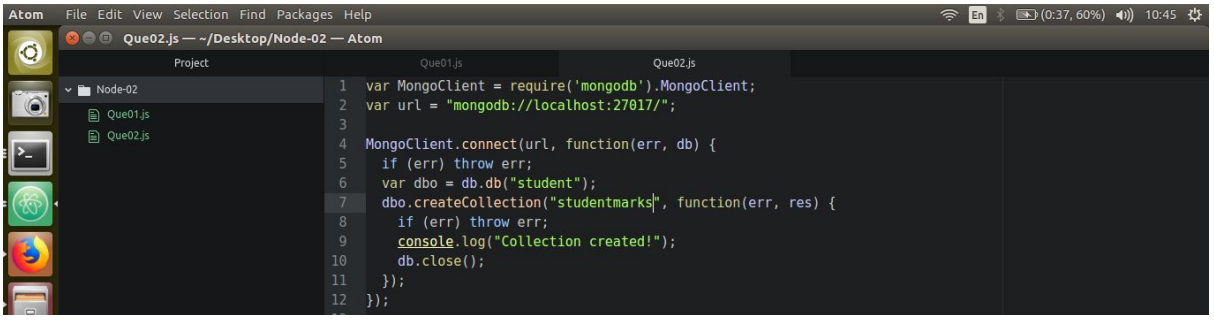
1) Create a Database called student.

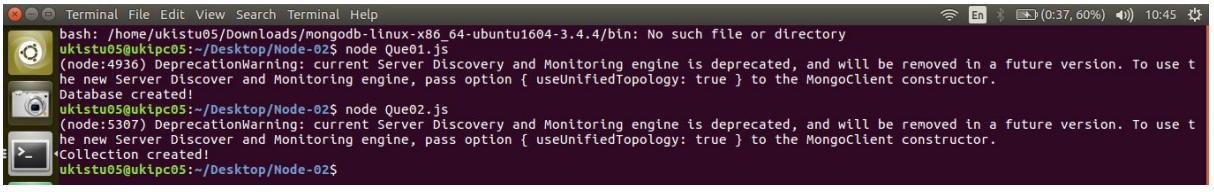
```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/student";

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



2) Create a collection called studentmarks.

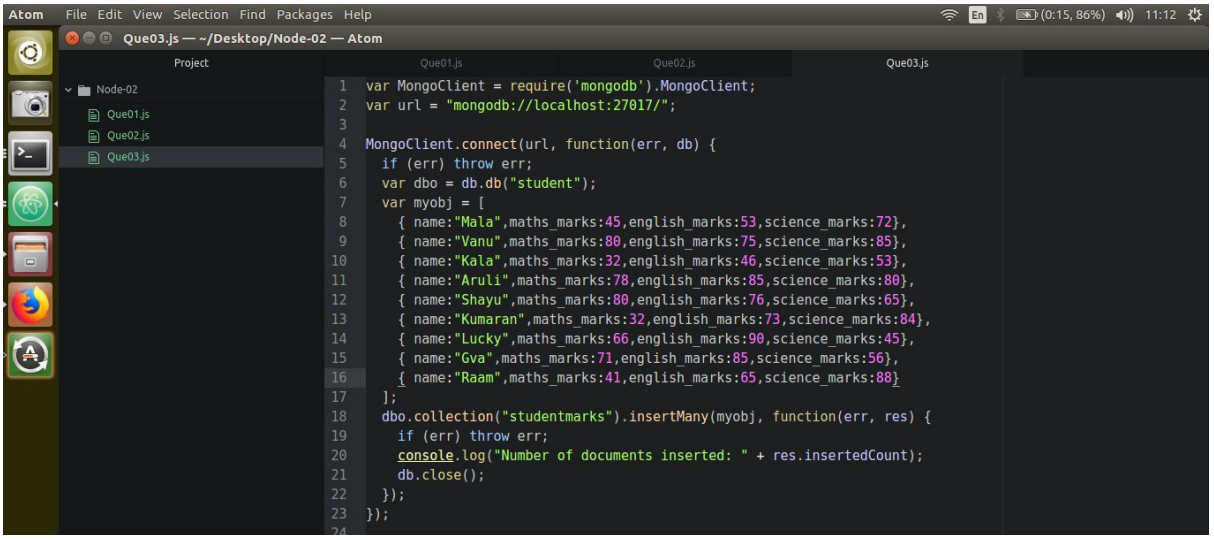
```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

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

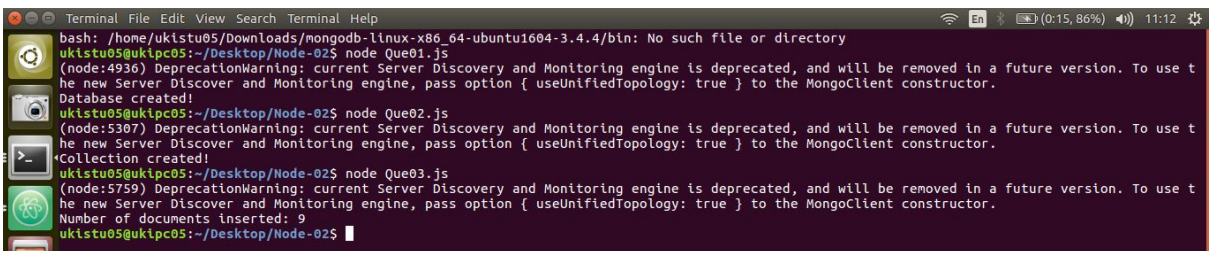




3) Create the documents listed in above table.

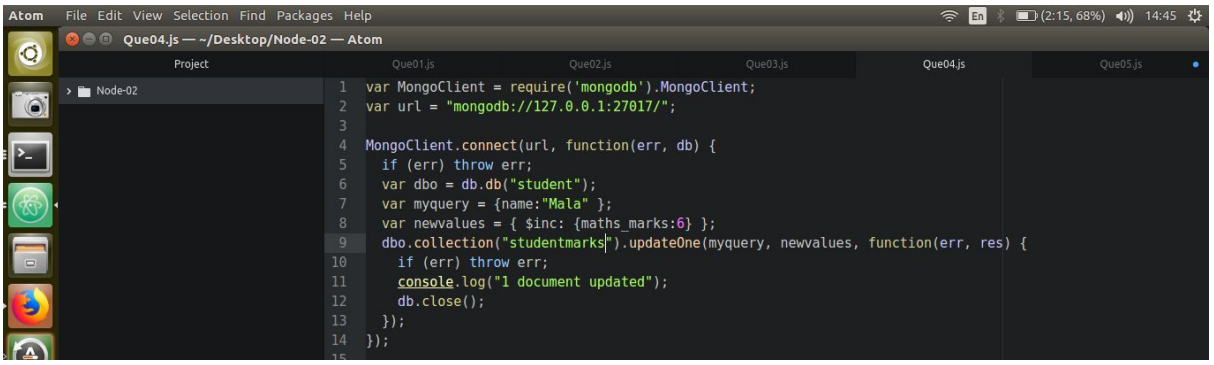
```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("student");
  var myobj = [
        { name:"Mala",maths_marks:45,english_marks:53,science_marks:72},
        { name:"Vanu",maths_marks:80,english_marks:75,science_marks:85},
        { name:"Kala",maths_marks:32,english_marks:46,science_marks:53},
        { name:"Aruli",maths_marks:78,english_marks:85,science_marks:80},
        { name:"Shayu",maths_marks:80,english_marks:76,science_marks:65},
        { name:"Kumaran",maths_marks:32,english_marks:73,science_marks:84},
        { name:"Lucky",maths_marks:66,english_marks:90,science_marks:45},
        { name:"Gva",maths_marks:71,english_marks:85,science_marks:56},
        { name:"Raam",maths_marks:41,english_marks:65,science_marks:88}
  ];
  dbo.collection("studentmarks").insertMany(myobj, function(err, res) {
        if (err) throw err;
        console.log("Number of documents inserted: " + res.insertedCount);
        db.close();
  });
});
```

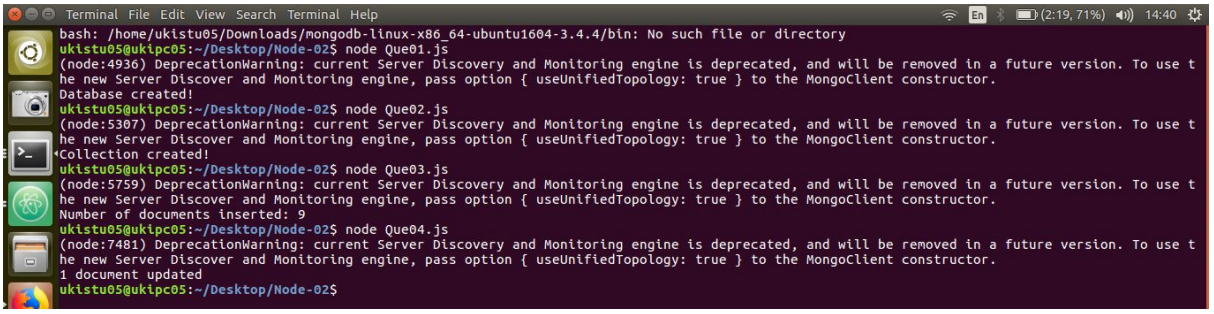




4) Increase the maths marks of Mala by 6 marks

```
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 = {name:"Mala" };
  var newvalues = { $inc: {maths_marks:6} };
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
          if (err) throw err;
          console.log("1 document updated");
          db.close();
  });
});
```

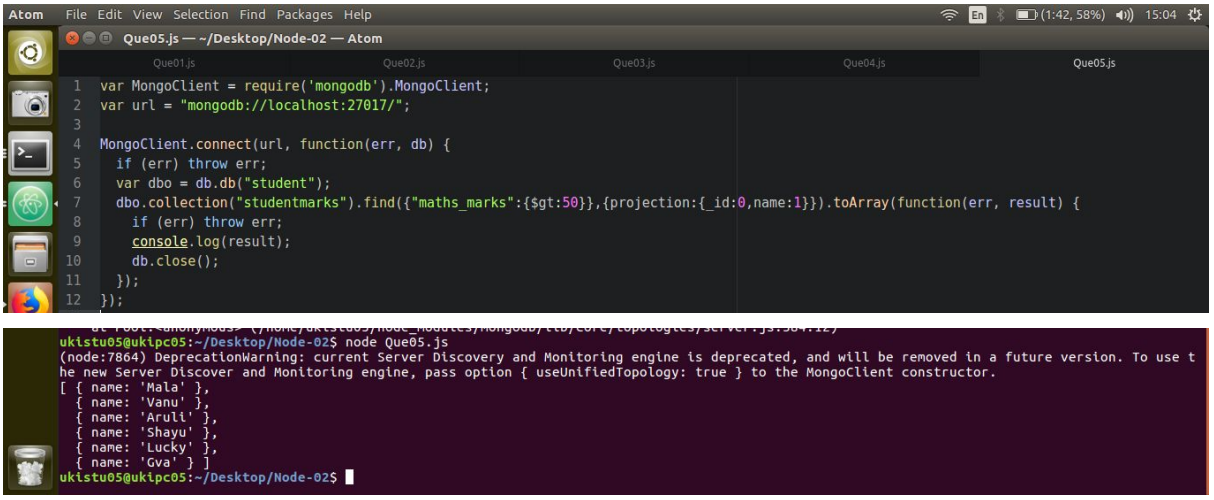




5) List the names of students who got more than 50 marks in Maths Subject.

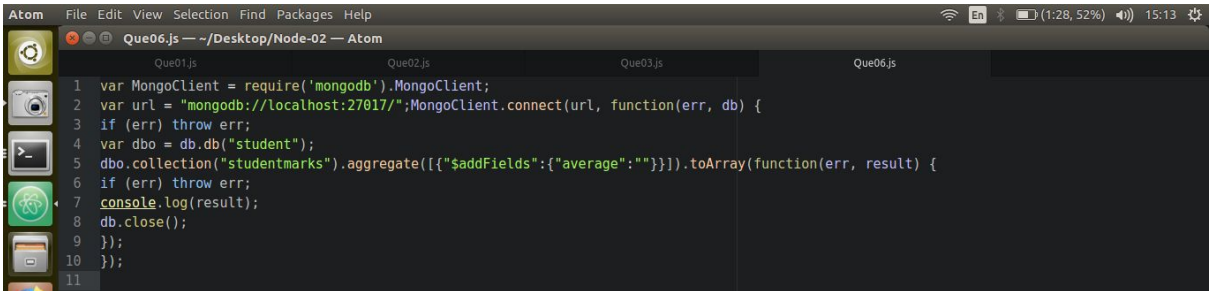
```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("student");

dbo.collection("studentmarks").find({"maths_marks":{$gt:50}},{projection:{_id:0,name:1}}).toA
rray(function(err, result) {
          if (err) throw err;
          console.log(result);
```

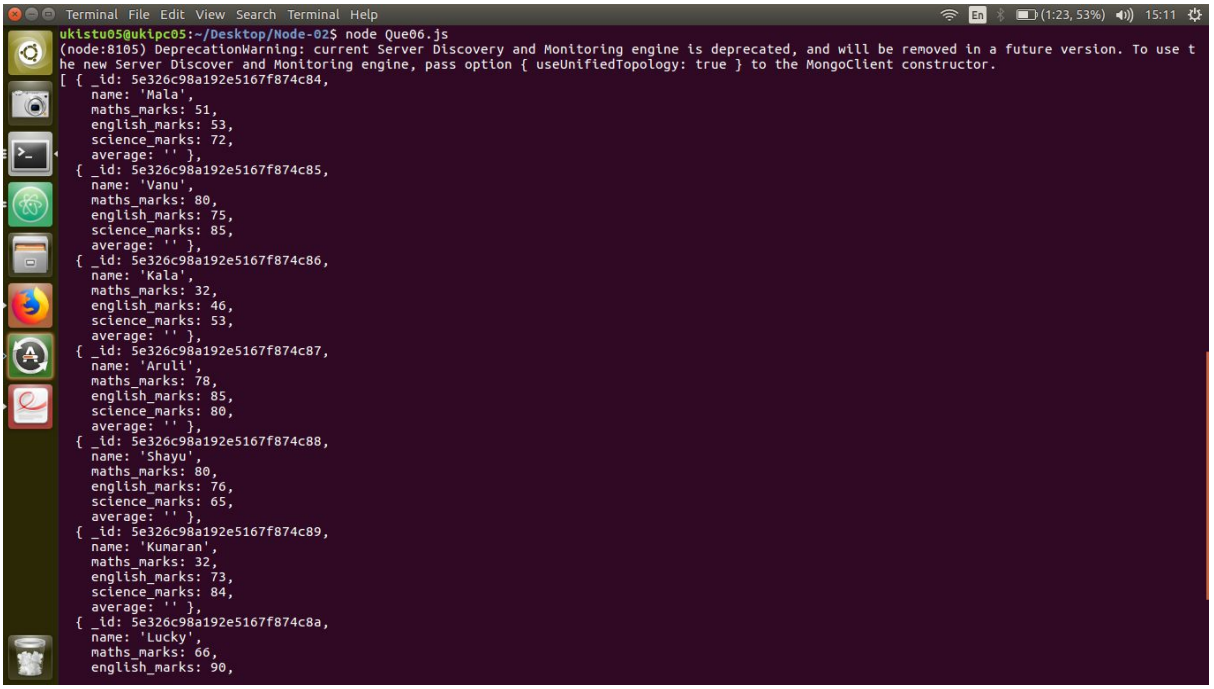
```
        db.close();
  });
});
```



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

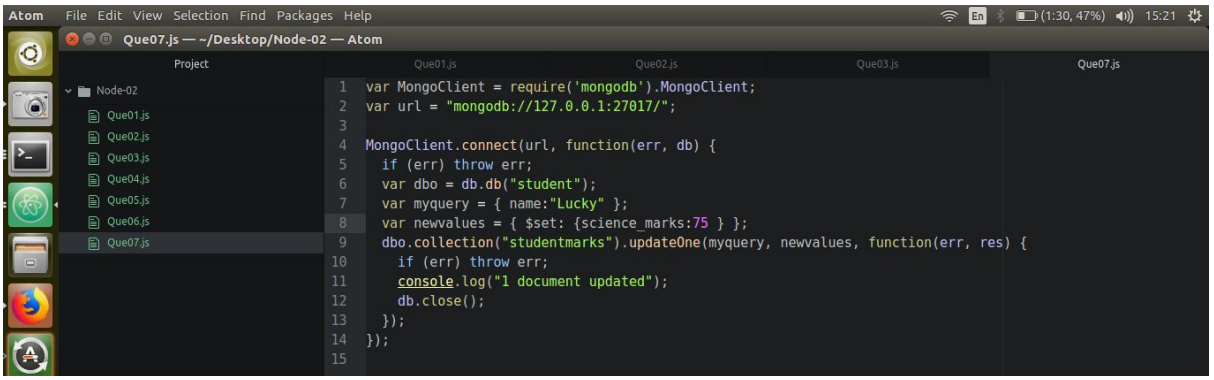
```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";MongoClient.connect(url, function(err, db) {
if (err) throw err;
var dbo = db.db("student");
dbo.collection("studentmarks").aggregate([{"$addFields":{"average":""}}]).toArray(function(err
, result) {
if (err) throw err;
console.log(result);
db.close();
});
});
```





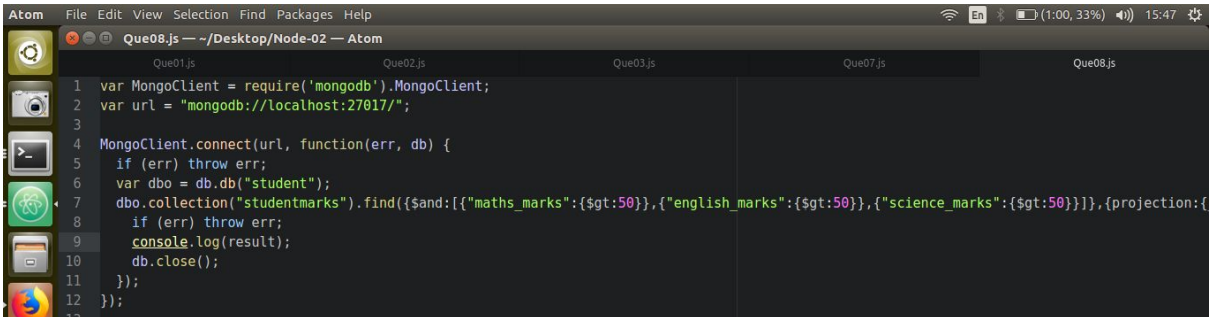
7) Update Marks_Science=75 to Lucky .

```
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 = { name:"Lucky" };
  var newvalues = { $set: {science_marks:75 } };
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
          if (err) throw err;
          console.log("1 document updated");
          db.close();
  });
})
```



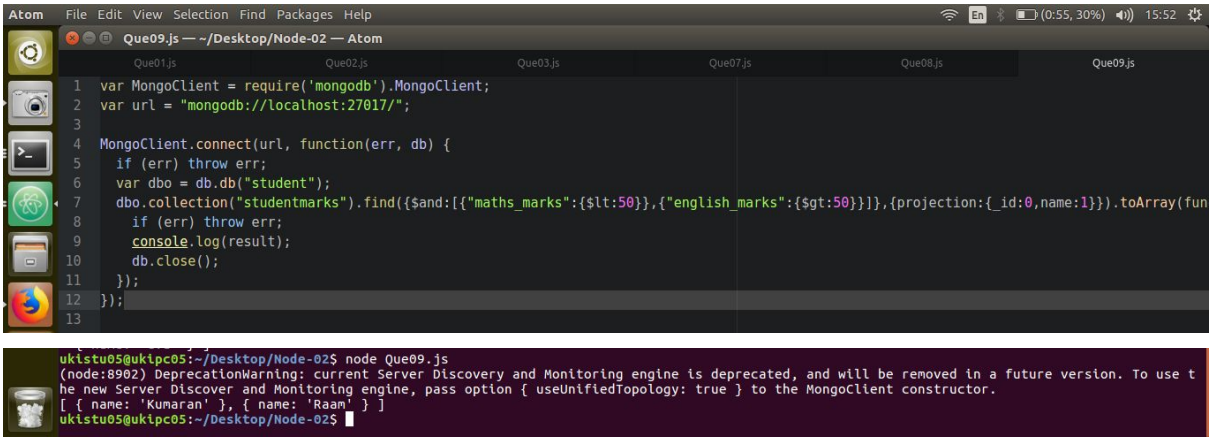
8) List the names who got more than 50 marks in all subjects.

```
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");

dbo.collection("studentmarks").find({$and:[{"maths_marks":{$gt:50}},{"english_marks":{$gt:5
0}},{"science_marks":{$gt:50}}]},{projection:{_id:0,name:1}}).toArray(function(err, result){
        if (err) throw err;
        console.log(result);
        db.close();
  });
});
```



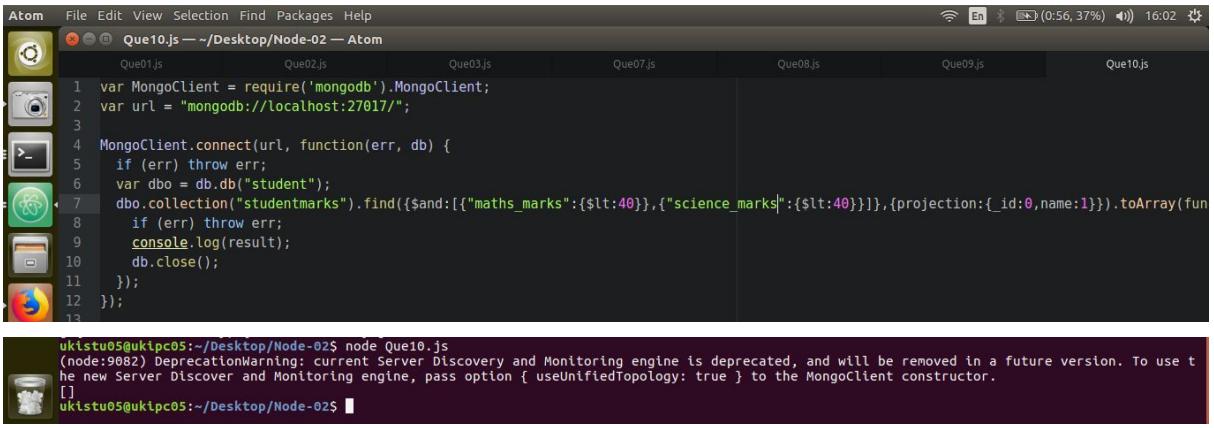
9) List the names who got less than 50 marks in Maths subject and more than 50 marks in English.

```
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:50}},{"english_marks":{$gt:50
}}]},{projection:{_id:0,name:1}}).toArray(function(err, result){
        if (err) throw err;
        console.log(result);
        db.close();
  });
});
```



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

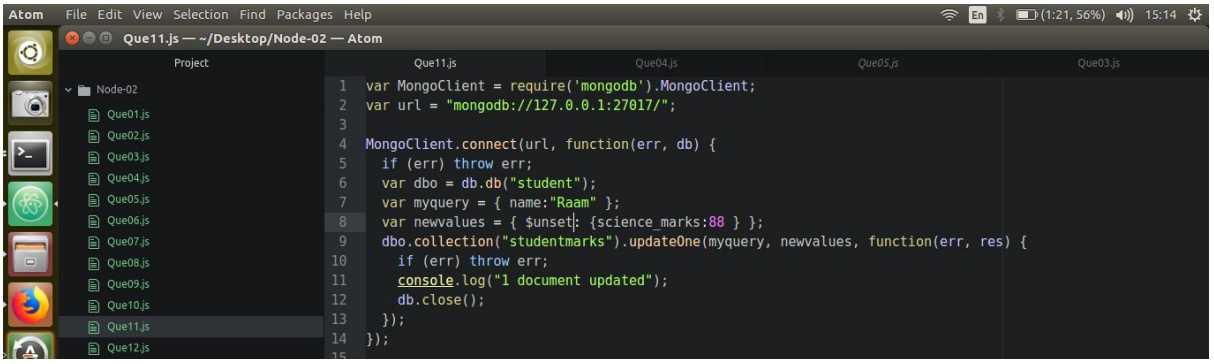
```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";

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

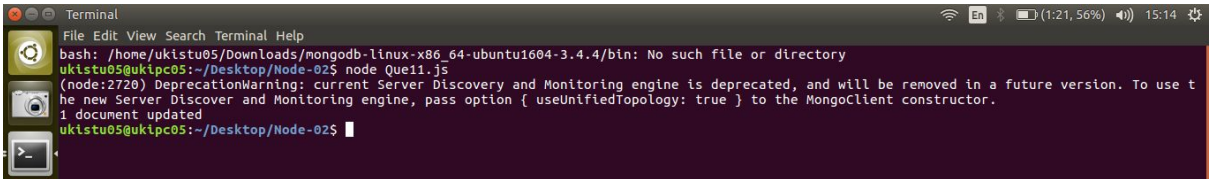


11) Remove Science column/field for Raam

```
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 = { name:"Raam" };
```

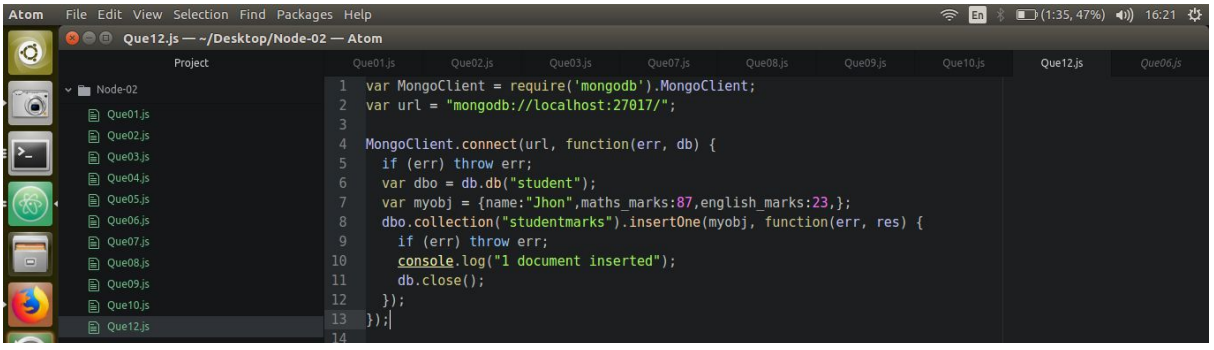
```
  var newvalues = { $unset: {science_marks:88 } };
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
        if (err) throw err;
        console.log("1 document updated");
        db.close();
  });
});
```





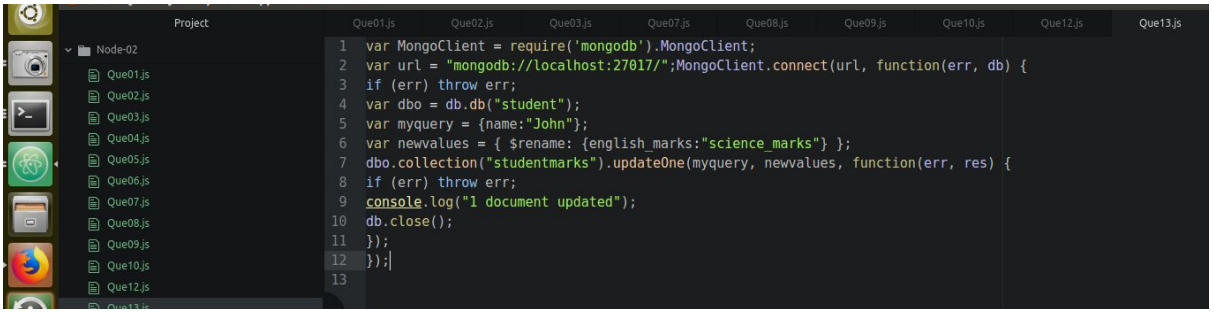
12) Update John's Math mark as 87 and English mark as 23, if john not available upsert.

```
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:"Jhon",maths_marks:87,english_marks:23,};
  dbo.collection("studentmarks").insertOne(myobj, function(err, res) {
        if (err) throw err;
        console.log("1 document inserted");
        db.close();
  });
});
```



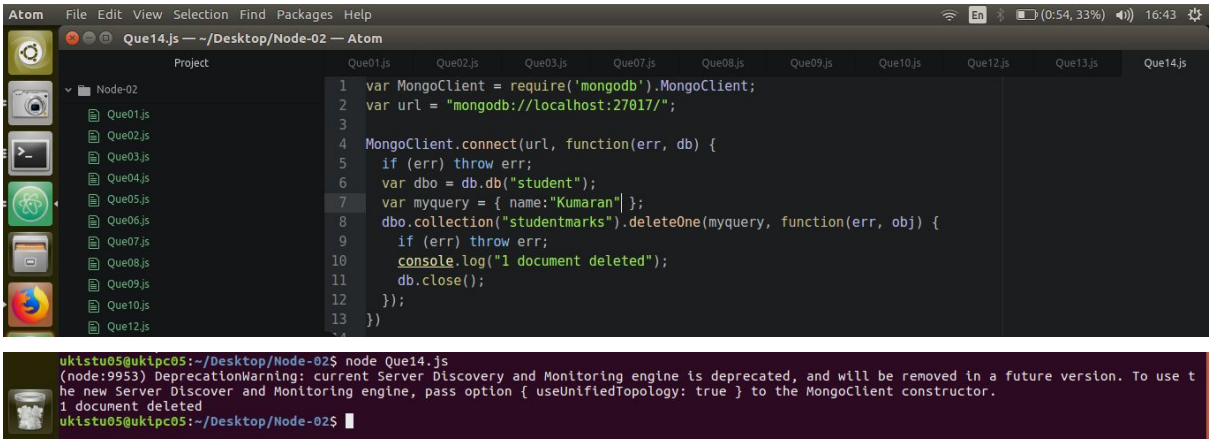
13) Rename the english_marks column/field for John to science_marks

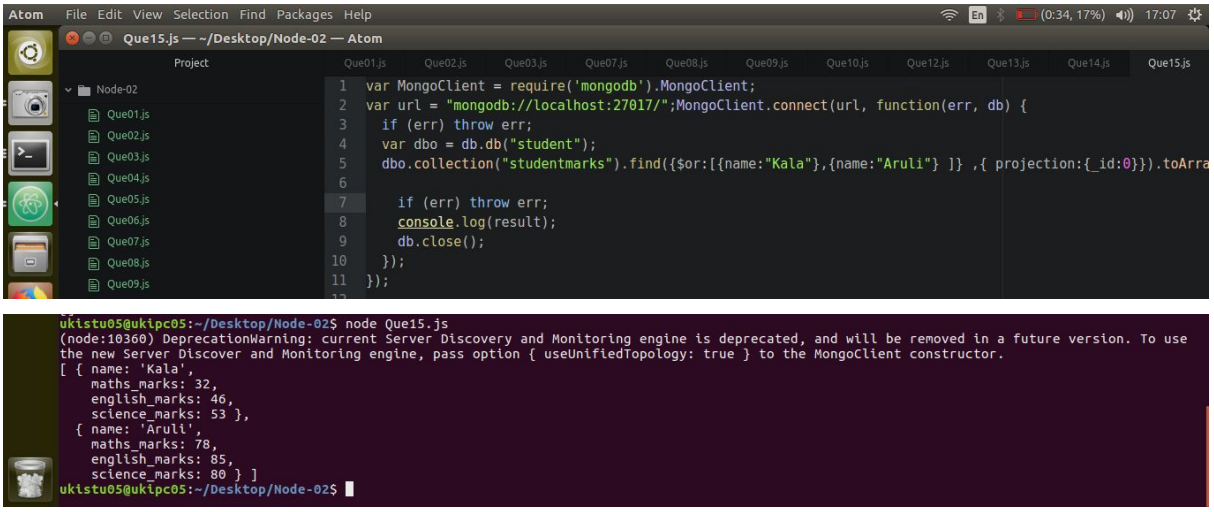
```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";MongoClient.connect(url, function(err, db) {
if (err) throw err;
var dbo = db.db("student");
var myquery = {name:"John"};
var newvalues = { $rename: {english_marks:"science_marks"} };
dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
if (err) throw err;
console.log("1 document updated");
db.close();
});
});
```



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 = { name:"Kumaran" };
  dbo.collection("studentmarks").deleteOne(myquery, function(err, obj) {
          if (err) throw err;
          console.log("1 document deleted");
          db.close();
  });
})
```



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

```
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({$or:[{name:"Kala"},{name:"Aruli"} ]} ,{
projection:{_id:0}}).toArray(function(err, result){

          if (err) throw err;
          console.log(result);
          db.close();
  });
});
```