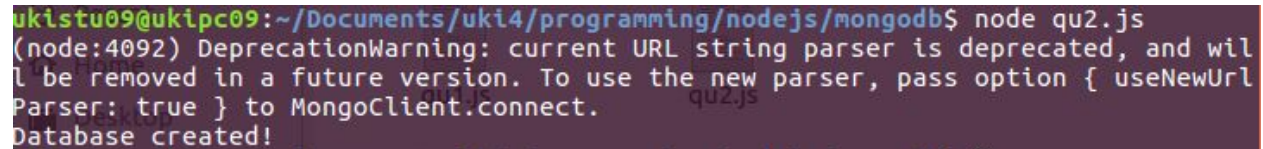


1) Create a Database called student

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

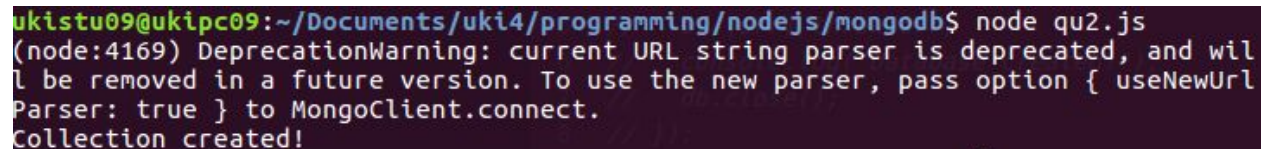


```
ukistu09@ukipc09:~/Documents/uki4/programming/nodejs/mongodb$ node qu2.js
(node:4092) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
Database created!
```

2) Create a collection called studentmarks

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



```
ukistu09@ukipc09:~/Documents/uki4/programming/nodejs/mongodb$ node qu2.js
(node:4169) 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.
Collection created!
```

3) Create the documents listed in above table.

```
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 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 : 75,cience_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();
});
});

```

```

ukistu09@ukipc09:~/Documents/uki4/programming/nodejs/mongodb$ node qu2.js
(node:4277) 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.
Number of documents inserted: 9

```

4) Increase the maths marks of Mala by 6 marks

```

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: "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();
  });
});

```

```

ukistu09@ukipc09:~/Documents/uki4/programming/nodejs/mongodb$ node qu2.js
(node:4345) 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

```

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/student";

```

```

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("student");
  dbo.collection("studentmarks").find({maths_marks:{$gt:50}}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});

```

```

uk1stu09@uk1pc09:~/Documents/uk14/programming/nodejs/mongodb$ node qu2.js
(node:4408) 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.
[ { _id: 5c529e40e0880b10b5740e24, name: 'Mala', maths_marks: 51, english_marks: 53, science_marks: 72 },
  { _id: 5c529e40e0880b10b5740e25, name: 'Vanu', maths_marks: 80, english_marks: 75, science_marks: 85 },
  { _id: 5c529e40e0880b10b5740e27, name: 'Aruli', maths_marks: 78, english_marks: 85, science_marks: 80 },
  { _id: 5c529e40e0880b10b5740e28, name: 'Shayu', maths_marks: 80, english_marks: 76, science_marks: 65 },
  { _id: 5c529e40e0880b10b5740e2a, name: 'Lucky', maths_marks: 66, english_marks: 90, science_marks: 45 },
  { _id: 5c529e40e0880b10b5740e2b, name: 'Gva', maths_marks: 71, english_marks: 75, science_marks: 56 } ]

```

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

```
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 = {};
```

```
  var newvalues = {$set: {Average: ""}};
```

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

```
    if (err) throw err;
```

```
    console.log("Average inputed");
```

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

```
  });
```

```
});
```

```

uk1stu09@uk1pc09:~/Documents/uk14/programming/nodejs/mongodb$ node qu2.js
(node:4465) 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.
Average inputed

```

7) Update Marks_Science=75 to Lucky .

```
code: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: "Lucky" };
```

```
  var newvalues = { $set: {science_marks:75 };
```

```

    dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
        if (err) throw err;
        console.log(" updated");
        db.close();
    });
});

```

```

ukistu09@ukipc09:~/Documents/uki4/programming/nodejs/mongodb$ node qu2.js
(node:4574) 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.
var url = "mongodb://127.0.0.1:27017/student"
updated

```

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

```

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");

```

```

    dbo.collection("studentmarks").find({maths_marks:{$gt:50},english_marks:{$gt:50}}).toArray(function(err, result) {
        if (err) throw err;
        console.log(result);
        db.close();
    });
});

```

```

ukistu09@ukipc09:~/Documents/uki4/programming/nodejs/mongodb$ node qu2.js
(node:4639) 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.
[ { _id: 5c529e40e0880b10b5740e24, name: 'Mala', maths_marks: 51, english_marks: 53, science_marks: 72, Average: '' },
  { _id: 5c529e40e0880b10b5740e25, name: 'Vanu', maths_marks: 80, english_marks: 75, science_marks: 85, Average: '' },
  { _id: 5c529e40e0880b10b5740e27, name: 'Aruli', maths_marks: 78, english_marks: 85, science_marks: 80, Average: '' },
  { _id: 5c529e40e0880b10b5740e28, name: 'Shayu', maths_marks: 80, english_marks: 76, science_marks: 65, Average: '' },
  { _id: 5c529e40e0880b10b5740e2a, name: 'Lucky', maths_marks: 66, english_marks: 90, science_marks: 75, Average: '' },
  { _id: 5c529e40e0880b10b5740e2b, name: 'Gva', maths_marks: 71, english_marks: 75, science_marks: 56, Average: '' } ]

```

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/student";
```

```
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}}]}).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/student";
```

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

```
  dbo.collection("studentmarks").find({$and:[{maths_marks:{$lt:50},science_marks:{$lt:50}}]}).toArray(
    function(err, result) {
      if (err) throw err;
      console.log(result);
      db.close();
    });
});
```

```
uk1stu09@uk1pc09:~/Documents/uk14/programming/nodejs/mongodb$ node qu2.js
(node:4692) 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.
[ { _id: 5c529e40e0880b10b5740e29, name: 'Kumaran', maths_marks: 32, english_marks: 73, science_marks: 84, Average: '' },
  { _id: 5c529e40e0880b10b5740e2c, name: 'Raam', maths_marks: 41, english_marks: 65, science_marks: 88, Average: '' } ]
```

11) Remove Science column/field for Raam

```
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: "Raam" };  
  var newvalues = { $unset: {science_marks:75 } };  
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {  
    if (err) throw err;  
    console.log("changed");  
    db.close();  
  });  
});
```

```
ukistu09@uklpc09:~/Documents/ukl4/programming/nodejs/mongodb$ node qu2.js  
(node:5000) 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.  
Number of documents changed: 1
```

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/student";
```

```
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").insertMany(myobj, function(err, res) {  
    if (err) throw err;  
    console.log("Number of documents changed: " + res.insertedCount);  
    db.close();  
  });  
});
```

```
ukistu09@uklpc09:~/Documents/ukl4/programming/nodejs/mongodb$ node qu2.js  
(node:5000) 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.  
Number of documents changed: 1
```

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

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

```

```

ukistu09@ukipc09:~/Documents/uk14/programming/nodejs/mongodb$ node qu2.js
(node:5060) 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.
document updated

```

14) Remove Kumaran's document from collection

```

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

```

```

ukistu09@ukipc09:~/Documents/uk14/programming/nodejs/mongodb$ node qu2.js
(node:5138) 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.
document deleted

```

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

```

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");
    dbo.collection("studentmarks").find({$or:[{name:"Aruli"},{name: "Kala"}]}).toArray(function(err, result) {
        if (err) throw err;
        console.log(result);
        db.close();
    });
});

```



```
ukistu09@ukipc09:~/Documents/uki4/programming/nodejs/mongodb$ node qu2.js
(node:5204) 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.
[ { _id: 5c529e40e0880b10b5740e26,
  name: 'Kala',
  maths_marks: 32,
  english_marks: 46,
  science_marks: 53,
  Average: '' },
  { _id: 5c529e40e0880b10b5740e27,
    name: 'Aruli',
    maths_marks: 78,
    english_marks: 85,
    science_marks: 80,
    Average: '' } ]
    dbo.collection("studentmarks").find({$or:[{name:"Aruli"},{name:"Kala"}]}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
```