

NodjsMongodb Exercise2

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();
});
```

```
ukistul3@ukipc13:~/Desktop/node.jsmongodb$ nodemon 01.js
```

```
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 01.js`
```

```
(node:15515) 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!
[nodemon] clean exit - waiting for changes before restart
```

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

```

^Cukistul3@ukipcl3:~/Desktop/node.jsmongodb$ nodemon 02.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 02.js`
(node:19904) 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!
[nodemon] clean exit - waiting for changes before restart

```

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:75, science_marks:56},
    { name: 'Lucky', 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();
  });
});

```

```

^Cukistul3@ukipcl3:~/Desktop/node.jsmongodb$ nodemon 03.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 03.js`
(node:20028) 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
[nodemon] clean exit - waiting for changes before restart

```

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();

  });
});

```

```

^Cukistul3@ukip13:~/Desktop/node.js$ mongod$ nodemon 04.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 04.js`
(node:20160) 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
[nodemon] clean exit - waiting for changes before restart

```

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");

  var query = {"maths_marks":{"$gt:50}};

  dbo.collection("studentmarks").find(query, { projection: { _id:0,science_marks:0,english_marks:0} })
  .toArray(function(err, result) {

    if (err) throw err;

    console.log(result);

    db.close();

  });
});

```

```

C:\kistul3@ukip13:~/Desktop/node.js$ mongod
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 05.js`
(node:20358) DeprecationWarning: current URL string parser is deprecated, and will be removed in a future version. To use the new parser, pass o
ption { useNewUrlParser: true } to MongoClient.connect.
[ { name: 'mala', maths_marks: 51, Average: 'null' },
  { name: 'vanu', maths_marks: 80, Average: 'null' },
  { name: 'Aruli', maths_marks: 78, Average: 'null' },
  { name: 'Shayu', maths_marks: 80, Average: 'null' },
  { name: 'Lucky', maths_marks: 66, Average: 'null' },
  { name: 'Gva', maths_marks: 71, Average: 'null' },
  { name: 'John', maths_marks: 87 },
  { name: 'Mala', maths_marks: 51 },
  { name: 'Vanu', maths_marks: 80 },
  { name: 'Aruli', maths_marks: 78 },
  { name: 'Shayu', maths_marks: 80 },
  { name: 'Lucky', maths_marks: 66 },
  { name: 'Gva', maths_marks: 71 } ]
[nodemon] clean exit - waiting for changes before restart

```

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

```

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();

  });
});

```

```

^Cukistul3@ukipcl3:~/Desktop/node.js$ mongod$ nodemon 06.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 06.js`
(node:20494) 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
[nodemon] clean exit - waiting for changes before restart

```

7) Update Marks_Science=75 to Lucky .


```
^Luk1stul3@ukip13:~/Desktop/node.js$ mongod$ nodemon 07.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 07.js`
(node:20651) 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
[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 = { 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.

```

^Cukistul3@ukipc13:~/Desktop/node.jsmongodb$ nodemon 08.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 08.js`
(node:20750) 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.
[ { name: 'mala', Average: 'null', average: '' },
  { name: 'vanu', Average: 'null' },
  { name: 'Aruli', Average: 'null' },
  { name: 'Shayu', Average: 'null' },
  { name: 'Lucky', Average: 'null' },
  { name: 'Gva', Average: 'null' },
  { name: 'Mala' },
  { name: 'Vanu' },
  { name: 'Aruli' },
  { name: 'Shayu' },
  { name: 'Gva' } ]
[nodemon] clean exit - waiting for changes before restart

```

```

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 query = {$and:[{"maths_marks":{"$gt:50}}, {"english_marks":{"$gt:50}}, {"science_marks":{"$gt:50}}]};

  dbo.collection("studentmarks").find(query, { projection: { _id:0, science_marks:0, english_marks:0, maths_marks:0 } }).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

```

^Cukistul3@ukipc13:~/Desktop/node.jsmongodb$ nodemon 09.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 09.js`
(node:20864) 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.
[ { name: 'kumaran' },
  { name: 'Raam' },
  { name: 'Kumaran' },
  { name: 'Lucky' } ]
[nodemon] clean exit - waiting for changes before restart

```

```

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:{<50}},{english_marks:{>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.


```
^Cukistul3@ukipcl3:~/Desktop/node.jsmongodb$ nodemon 10.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 10.js`
(node:20984) 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.
[]
[nodemon] clean exit - waiting for changes before restart
```

```
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();

  });

});
```

LF UTF-8 Babel master +25

11) Remove Science column/field for Raam

```

Cukistul3@ukipcl3:~/Desktop/node.jsmongodb$ nodemon ll.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node ll.js`
(node:21001) 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
[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 = {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.

```
^Cukistul3@ukipc13:~/Desktop/node.js$ mongod --fork --logpath /dev/null
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 12.js`
(node:21186) 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 upserted
[nodemon] clean exit - waiting for changes before restart
```

```
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: "John", maths_marks: 87, english_marks: 23 };

  dbo.collection("studentmarks").insertOne(myobj, {upsert: true, safe: false}, function(err, res) {

    if (err) throw err;

    console.log("1 document upserted");

    db.close();

  });

});
```

LF UTF-8 Babel master

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

```
^Cukistui3@ukipc13:~/Desktop/node.js$ mongod$ nodemon 13.js
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 13.js`
(node:21274) 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
[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 = { _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();

  });
```

14) Remove Kumaran's document from collection

```
^Cukistul3@ukipc13:~/Desktop/node.js$ mongod --fork --logpath /dev/null
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 14.js`
(node:21391) 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 deleted
[nodemon] clean exit - waiting for changes before restart
```

```
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 = { address: 'Mountain 21' };

  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


```
lukistul3@ukipcl3:~/Desktop/node.js$ mongod --fork --logpath /dev/null
[nodemon] 1.19.1
[nodemon] to restart at any time, enter `rs`
[nodemon] watching: *.*
[nodemon] starting `node 15.js`
(node:21501) 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.
[ { name: 'Aruli', maths_marks: 78, science_marks: 80 },
  { name: 'Kala', maths_marks: 32, science_marks: 53 },
  { name: 'Aruli', maths_marks: 78, science_marks: 80 } ]
[nodemon] clean exit - waiting for changes before restart
```

```
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:"Aruli"},{name:"Kala"}]}), { projection: { _id: 0, name: 1 }};

  if (err) throw err;

  console.log(result);

  db.close();

});
```