

- 1) Create a Database called student
- 2) Create a collection called studentmarks
- 3) Create the documents listed in above table.
- 4) Increase the maths marks of Mala by 6 marks
- 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
- 12) Update John's Math mark as 87 and English mark as 23, if john not available upsert.
- 13) Rename the english_marks column/field for John to science_marks
- 14) Remove Kumaran's document from collection
- 15) Find Kala's or Aruli's math_marks and science_marks

- 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) `console.log("Database created!");`
- 7) `db.close();`
- 8) `});`
- 9)

```

ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 1.js
Database created!
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$

```

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

```

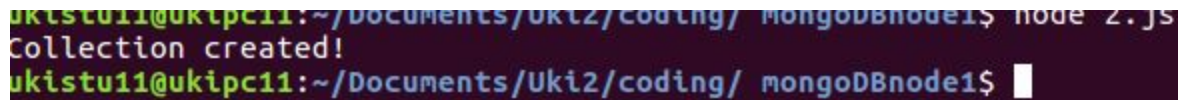
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("student");
  dbo.createCollection("studentmarks", function(err, res) {

```

```

    if (err) throw err;
    console.log("Collection created!");
    db.close();
  });
});

```



```

ukistu11@ukipc11:~/Documents/uk12/coding/ mongoDBnode1$ node 2.js
Collection created!
ukistu11@ukipc11:~/Documents/uk12/coding/ mongoDBnode1$

```

```

3) 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,eng_marks: 53,sci_marks: 72},
    { name: "vanu",maths_marks: 80,eng_marks: 75,sci_marks: 85},
    { name: "kala",maths_marks: 32,eng_marks: 46,sci_marks: 53},
    { name: "aruli",maths_marks: 78,eng_marks: 85,sci_marks: 80},
    { name: "shayu",maths_marks: 80,eng_marks: 76,sci_marks: 65},
    { name: "kumaran",maths_marks: 32,eng_marks: 73,sci_marks: 84},
    { name: "lucky",maths_marks: 66,eng_marks: 90,sci_marks: 45},
    { name: "gva",maths_marks: 71,eng_marks: 75,sci_marks: 56},
    { name: "raam",maths_marks: 41,eng_marks: 65,sci_marks: 88},
  ];
  dbo.collection("studentmarks").insertMany(myobj, function(err, res) {
    if (err) throw err;
    console.log("Number of documents inserted: " + res.insertedCount);
    db.close();
  });
});

```

```

ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 3.js
Number of documents inserted: 9
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$

```

```

4) 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: "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();
  });
});

```

```

ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 4.js
1 document updated
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$

```

```

5) 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 } }, { _id: false, name: true, address:
true }).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});

```

prkstud1@prktpc11:~/Documents/prk12/coding/ MongoDBNodeJS\$ node 9.js

```
[ { _id: 593a379b8e9b741534b325e4,
  name: 'mala',
  maths_marks: 57,
  english_marks: 53,
  science_marks: 72 },
  { _id: 593a379b8e9b741534b325e5,
  name: 'venu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85 },
  { _id: 593a379b8e9b741534b325e7,
  name: 'aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80 },
  { _id: 593a379b8e9b741534b325e8,
  name: 'shayu',
  maths_marks: 80,
  english_marks: 76,
  science_marks: 65 },
  { _id: 593a379b8e9b741534b325eb,
  name: 'gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56 },
  { _id: 593e1eac8f204610955f358b,
  name: 'john',
  maths_marks: 87,
  english_marks: 23 },
  { _id: 593e2aa80d7b571540b41af4,
  name: 'john',
  maths_marks: 87,
  english_marks: 23 },
```

```

{ _id: 593e2aa80d7b571540b41af4,
  name: 'john',
  maths_marks: 87,
  english_marks: 23 },
{ _id: 5a60220c8d4b961262dcb658,
  name: 'vanu',
  maths_marks: 80,
  eng_marks: 75,
  sci_marks: 85 },
{ _id: 5a60220c8d4b961262dcb65a,
  name: 'aruli',
  maths_marks: 78,
  eng_marks: 85,
  sci_marks: 80 },
{ _id: 5a60220c8d4b961262dcb65b,
  name: 'shayu',
  maths_marks: 80,
  eng_marks: 76,
  sci_marks: 65 },
{ _id: 5a60220c8d4b961262dcb65d,
  name: 'lucky',
  maths_marks: 66,
  eng_marks: 90,
  sci_marks: 45 },
{ _id: 5a60220c8d4b961262dcb65e,
  name: 'gva',
  maths_marks: 71,
  eng_marks: 75,
  sci_marks: 56 } ]

```

```

istu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ █

```

```

6) 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(res.result.nModified + " document(s) updated");
    db.close();
  });
});

```

```
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 6.js
9 document(s) updated
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$
```

```
"_id" : ObjectId("5a602ee8db88cd18730e6e25"),
"name" : "mala",
"maths_marks" : 51,
"eng_marks" : 53,
"sci_marks" : 72,
"average" : ""
```

```
"_id" : ObjectId("5a602ee8db88cd18730e6e26"),
"name" : "vanu",
"maths_marks" : 80,
"eng_marks" : 75,
"sci_marks" : 85,
"average" : ""
```

```
"_id" : ObjectId("5a602ee8db88cd18730e6e27"),
"name" : "kala",
"maths_marks" : 32,
"eng_marks" : 46,
"sci_marks" : 53,
"average" : ""
```

```
"_id" : ObjectId("5a602ee8db88cd18730e6e28"),
"name" : "aruli",
"maths_marks" : 78,
"eng_marks" : 85,
"sci_marks" : 80,
"average" : ""
```

```
"_id" : ObjectId("5a602ee8db88cd18730e6e29"),
"name" : "shayu",
"maths_marks" : 80,
```



```
"_id" : ObjectId("5a602ee8db88cd18730e6e28"),
"name" : "aruli",
"maths_marks" : 78,
"eng_marks" : 85,
"sci_marks" : 80,
"average" : ""

"_id" : ObjectId("5a602ee8db88cd18730e6e29"),
"name" : "shayu",
"maths_marks" : 80,
"eng_marks" : 76,
"sci_marks" : 65,
"average" : ""

"_id" : ObjectId("5a602ee8db88cd18730e6e2a"),
"name" : "kumaran",
"maths_marks" : 32,
"eng_marks" : 73,
"sci_marks" : 84,
"average" : ""

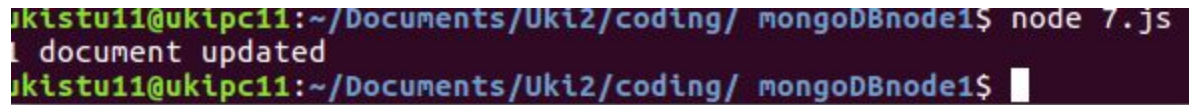
"_id" : ObjectId("5a602ee8db88cd18730e6e2b"),
"name" : "lucky",
"maths_marks" : 66,
"eng_marks" : 90,
"sci_marks" : 45,
"average" : ""

"_id" : ObjectId("5a602ee8db88cd18730e6e2c"),
"name" : "gva",
"maths_marks" : 71,
"eng_marks" : 75,
```

```
7) 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: {sci_marks: 75}};
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
```

```
        console.log("1 document updated");
        db.close();
    });
};
```

A terminal window with a dark background. The prompt is 'ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1\$'. The command 'node 7.js' has been executed, and the output '1 document updated' is displayed on the next line. The prompt is now 'ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1\$' followed by a cursor.

```
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 7.js
1 document updated
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$
```

```
8) 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: {$gt: 50},sci_marks: {$gt: 50},eng_marks:
{$gt: 50}}, { _id: false, name: true, address: true }).toArray(function(err, result) {
        if (err) throw err;
        console.log(result);
        db.close();
    });
});
```



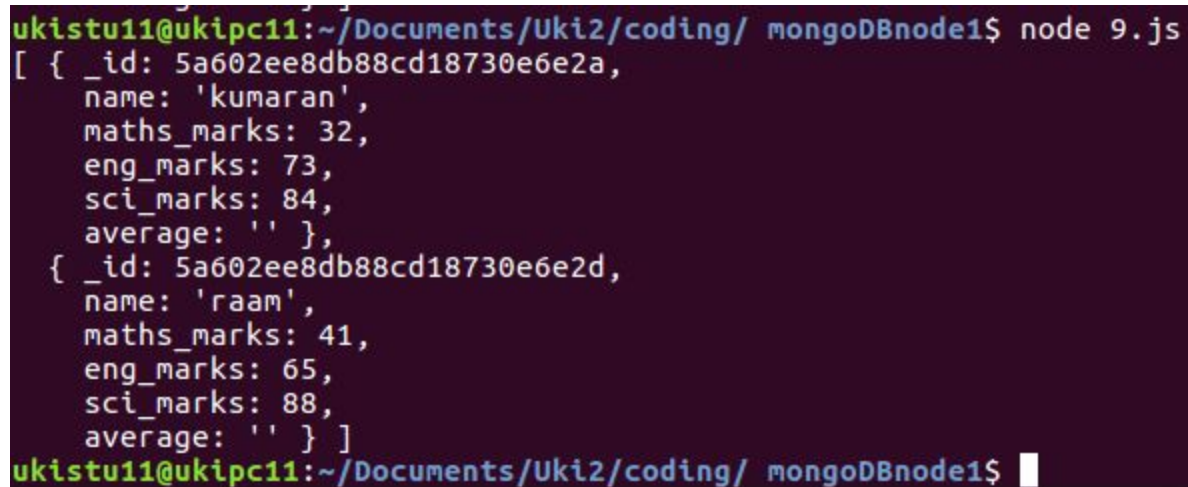
```
kristu11@ukipc11: ~/Documents/Uki2/coding/ mongoDBnode1$ node 01.js
{ _id: 5a602ee8db88cd18730e6e25,
  name: 'mala',
  maths_marks: 51,
  eng_marks: 53,
  sci_marks: 72,
  average: '' },
{ _id: 5a602ee8db88cd18730e6e26,
  name: 'vanu',
  maths_marks: 80,
  eng_marks: 75,
  sci_marks: 85,
  average: '' },
{ _id: 5a602ee8db88cd18730e6e28,
  name: 'aruli',
  maths_marks: 78,
  eng_marks: 85,
  sci_marks: 80,
  average: '' },
{ _id: 5a602ee8db88cd18730e6e29,
  name: 'shayu',
  maths_marks: 80,
  eng_marks: 76,
  sci_marks: 65,
```

```
  name: 'aruli',
  maths_marks: 78,
  eng_marks: 85,
  sci_marks: 80,
  average: '' },
{ _id: 5a602ee8db88cd18730e6e29,
  name: 'shayu',
  maths_marks: 80,
  eng_marks: 76,
  sci_marks: 65,
  average: '' },
{ _id: 5a602ee8db88cd18730e6e2b,
  name: 'lucky',
  maths_marks: 66,
  eng_marks: 90,
  sci_marks: 75,
  average: '' },
{ _id: 5a602ee8db88cd18730e6e2c,
  name: 'gva',
  maths_marks: 71,
  eng_marks: 75,
  sci_marks: 56,
  average: '' } ]
```

```
kristu11@ukipc11: ~/Documents/Uki2/coding/ mongoDBnode1$
```

```
9) 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.collection("customers").find({}, { _id: false, name: true, address: true
}).toArray(function(err, result) {
  if (err) throw err;
  console.log(result);
  db.close();
});
});
```



```
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 9.js
[ { _id: 5a602ee8db88cd18730e6e2a,
  name: 'kumaran',
  maths_marks: 32,
  eng_marks: 73,
  sci_marks: 84,
  average: '' },
  { _id: 5a602ee8db88cd18730e6e2d,
  name: 'raam',
  maths_marks: 41,
  eng_marks: 65,
  sci_marks: 88,
  average: '' } ]
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$
```

```
10) 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: {$lt: 40},sci_marks: {$lt:
40}}).toArray(function(err, result) {
  if (err) throw err;
  console.log(result);
  db.close();
});
});
```

```

average: 75 ]
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 10.js
[]
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$

```

```

11) 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: {sci_marks: 75}};
  dbo.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log("1 document updated");
    db.close();
  });
});

```

```

ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 11.js
1 document updated
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$

```

```

12) 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, eng_marks: 27 };

  dbo.collection("studentmarks").insertOne(myobj, function(err, res) {
    if (err) throw err;
    console.log("1 document inserted");
    db.close();
  });
});

```

```
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 12.js
1 document inserted
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$
```

```
13) 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();
  });
});
```

```
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 13.js
1 document updated
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$
```

```
14) 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();
  });
});
```

```
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 14.js
1 document deleted
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$
```

```
15) 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"}]}, {maths_marks: true,
sci_marks: true, address: true }).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$ node 15.js
[
  { _id: 5a602ee8db88cd18730e6e27,
    name: 'kala',
    maths_marks: 32,
    eng_marks: 46,
    sci_marks: 53,
    average: '' },
  { _id: 5a602ee8db88cd18730e6e28,
    name: 'aruli',
    maths_marks: 78,
    eng_marks: 85,
    sci_marks: 80,
    average: '' } ]
ukistu11@ukipc11:~/Documents/Uki2/coding/ mongoDBnode1$
```