

1) Create a Database called student

```
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.1.js
Database created!
```

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

2) Create a collection called studentmarks

```
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.2.js
createCollection!
```

```
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    db.createCollection("studentmarks", function(err, res) {
7      if (err) throw err;
8      console.log("createCollection!");
9      db.close();
10   });
11 });
```

3) Create the documents listed in above table.

```
at process._tickCallback (internal/process/next_tick.js:104:5)
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node find2.js
[ { _id: 593a379b8e9b741534b325e4,
  name: 'mala',
  maths_marks: 45,
  english_marks: 53,
  science_marks: 72 },
  { _id: 593a379b8e9b741534b325e5,
  name: 'venu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85 },
  { _id: 593a379b8e9b741534b325e6,
  name: 'kala',
  maths_marks: 32,
  english_marks: 46,
  science_marks: 53 },
  { _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: 593a379b8e9b741534b325e9,
  name: 'kumaran',
  maths_marks: 32,
  english_marks: 73,
  science_marks: 84 },
  { _id: 593a379b8e9b741534b325ea,
  name: 'lucky',
  maths_marks: 66,
  english_marks: 90,
```

```
  science_marks: 45 },
  { _id: 593a379b8e9b741534b325eb,
  name: 'gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56 },
  { _id: 593a379b8e9b741534b325ec,
  name: 'raam',
  maths_marks: 41,
  english_marks: 65,
  science_marks: 88 } ]
```

```

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    db.collection("studentmarks").find({}).toArray(function(err, result) {
7      if (err) throw err;
8      console.log(result);
9      db.close();
10   });
11 });
12

```

4) Increase the maths marks of Mala by 6 marks

```

ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.4.js
1 record updated
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node find2.js

```

```

1  var MongoClient = require('mongodb').MongoClient;
2  var url = "mongodb://127.0.0.1:27017/student";
3
4  MongoClient.connect(url, function(err, db) {
5    if (err) throw err;
6    var myquery = {maths_marks:45};
7    var newvalues = {$set: {maths_marks:45+6}};
8    db.collection("studentmarks").update(myquery, newvalues, function(err, res) {
9      if (err) throw err;
10     console.log(res.result.nModified + " record updated");
11     db.close();
12   });
13 });
14

```

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

```
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.5.js
[ { _id: 593a379b8e9b741534b325e4,
  name: 'mala',
  maths_marks: 51,
  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: 593a379b8e9b741534b325ea,
  name: 'lucky',
  maths_marks: 66,
  english_marks: 90,
  science_marks: 45 },
  { _id: 593a379b8e9b741534b325eb,
  name: 'gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56 } ]
ukistu11@ukipc11:~/Documents/uki_exercises/fd$
```

```
1 var http = require('http');
2 var MongoClient = require('mongodb').MongoClient;
3 var url = "mongodb://localhost:27017/student";
4
5 MongoClient.connect(url, function(err, db) {
6   if (err) throw err;
7   var query = { maths_marks: { $gt: 50 } };
8   db.collection("studentmarks").find(query).toArray(function(err, result) {
9     if (err) throw err;
10    console.log(result);
11    db.close();
12  });
13 });
14
```

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

```
science_marks: 56 } ]  
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.6.js  
1 record inserted  
ukistu11@ukipc11:~/Documents/uki_exercises/fd$
```

```
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 myobj = { Average: "" };  
7   db.collection("studentmarks").insertOne(myobj, function(err, res) {  
8     if (err) throw err;  
9     console.log("1 record inserted");  
10    db.close();  
11  });  
12 });  
13
```

7) Update Marks_Science=75 to Lucky .

```
1 record inserted  
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.7.js  
1 record updated  
ukistu11@ukipc11:~/Documents/uki_exercises/fd$
```

```
1 var MongoClient = require('mongodb').MongoClient;  
2 var url = "mongodb://127.0.0.1:27017/student";  
3  
4 MongoClient.connect(url, function(err, db) {  
5   if (err) throw err;  
6   var myquery = { science_marks:45 };  
7   var newvalues = { name:"Lucky",science_marks:75 };  
8   db.collection("studentmarks").update(myquery, newvalues, function(err, res) {  
9     if (err) throw err;  
10    console.log(res.result.nModified + " record updated");  
11    db.close();  
12  });  
13 });
```

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

```
1 var http = require('http');
2 var MongoClient = require('mongodb').MongoClient;
3 var url = "mongodb://localhost:27017/student";
4
5 MongoClient.connect(url, function(err, db) {
6   if (err) throw err;
7   var query = { maths_marks: {$gt:50},english_marks: {$gt:50},science_marks: {$gt:50} };
8   db.collection("studentmarks").find(query).toArray(function(err, result) {
9     if (err) throw err;
10    console.log(result);
11    db.close();
12  });
13 });
```

```
  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 } ]
```

luki@luki10:~/Documents/luki_exercises/fds

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

```
science_marks: 50 } ]  
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.9.js  
[ { _id: 593a379b8e9b741534b325e9,  
  name: 'kumaran',  
  maths_marks: 32,  
  english_marks: 73,  
  science_marks: 84 },  
  { _id: 593a379b8e9b741534b325ec,  
    name: 'raam',  
    maths_marks: 41,  
    english_marks: 65,  
    science_marks: 88 } ]  
ukistu11@ukipc11:~/Documents/uki_exercises/fd$
```

```
1 var http = require('http');  
2 var MongoClient = require('mongodb').MongoClient;  
3 var url = "mongodb://localhost:27017/student";  
4  
5 MongoClient.connect(url, function(err, db) {  
6   if (err) throw err;  
7   var query = { maths_marks: {$lt:50},english_marks: {$gt:50} };  
8   db.collection("studentmarks").find(query).toArray(function(err, result) {  
9     if (err) throw err;  
10    console.log(result);  
11    db.close();  
12  });  
13 });  
14
```

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

```
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.10.js  
[]  
ukistu11@ukipc11:~/Documents/uki_exercises/fd$
```

```
1 var http = require('http');  
2 var MongoClient = require('mongodb').MongoClient;  
3 var url = "mongodb://localhost:27017/student";  
4  
5 MongoClient.connect(url, function(err, db) {  
6   if (err) throw err;  
7   var query = { maths_marks: {$lt:40},science_marks: {$lt:40} };  
8   db.collection("studentmarks").find(query).toArray(function(err, result) {  
9     if (err) throw err;  
10    console.log(result);  
11    db.close();  
12  });  
13 });  
14
```

11) Remove Science column/field for Raam

```
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.11.js
1 document(s) deleted
```

```
1 var http = require('http');
2 var MongoClient = require('mongodb').MongoClient;
3 var url = "mongodb://localhost:27017/student";
4
5 MongoClient.connect(url, function(err, db) {
6   if (err) throw err;
7   var myquery1 = { name:"Raam" };
8   var myquery = { science_marks:88 };
9   db.collection("studentmarks").remove(myquery, function(err, obj) {
10    if (err) throw err;
11    console.log(obj.result.n + " document(s) deleted");
12    db.close();
13  });
14 });
15
```

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

```
1 document(s) deleted
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.12.js
1 record inserted
```

```
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 myobj = { name: "john", maths_marks:87 ,english_marks:23 };
7   db.collection("studentmarks").insertOne(myobj, function(err, res) {
8     if (err) throw err;
9     console.log("1 record inserted");
10    db.close();
11  });
12 });
13
```


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

```
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.13.js
1 record inserted
ukistu11@ukipc11:~/Documents/uki_exercises/fd$
```

```
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 myobj = { name: "john", maths_marks:87 ,english_marks:23 };
7   db.collection("studentmarks").insertOne(myobj, function(err, res) {
8     if (err) throw err;
9     console.log("1 record inserted");
10    db.close();
11  });
12 });
13
```

14) Remove Kumaran's document from collection

```
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.14.js
1 document(s) deleted
ukistu11@ukipc11:~/Documents/uki_exercises/fd$
```

```
1 var http = require('http');
2 var MongoClient = require('mongodb').MongoClient;
3 var url = "mongodb://localhost:27017/student";
4
5 MongoClient.connect(url, function(err, db) {
6   if (err) throw err;
7   var myquery = { name:"kumaran" };
8   db.collection("studentmarks").remove(myquery, function(err, obj) {
9     if (err) throw err;
10    console.log(obj.result.n + " document(s) deleted");
11    db.close();
12  });
13 });
14
```

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

```
1 document(s) deleted
ukistu11@ukipc11:~/Documents/uki_exercises/fd$ node 2.12.js
1 record inserted
```

```
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   db.collection("studentmarks").find({$or:[{name:"kala"},{name:"aruli"}]}, {maths_marks:1, science_marks:1}).toArray(function(err, result) {
7     if (err) throw err;
8     console.log(result);
9     db.close();
10  });
11 });
12
```