

NODE JS –MONGO DB 2

1. Create Database

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

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 1.js
Database created!
ukistu07@ukipc07:~/Desktop/mongo2$
```

2. Create collection

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uki2 = db.db("student");
  uki2.createCollection("studentmarks", function(err, res) {
    if (err) throw err;
    console.log("Collection created!");
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 2.js
Collection created!
ukistu07@ukipc07:~/Desktop/mongo2$
```

3. Include the Documents

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uki = db.db("student");
  var songs = [
    { 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: 'Raam', maths_marks:41 , english_marks:65, science_marks: 88}
  ];
  uki.collection("studentmarks").insertMany(songs, function(err, res) {
    if (err) throw err;
    console.log("Number of documents inserted: " + res.insertedCount);
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 3.js
Number of documents inserted: 9
ukistu07@ukipc07:~/Desktop/mongo2$
```

4. Increment The marks of Mala

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

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 4.js
1 document updated
ukistu07@ukipc07:~/Desktop/mongo2$
```

5)

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uki2 = db.db("student");
  uki2.collection("studentmarks").find({maths_marks:{$gt:50}}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 5.js
[ { _id: 5a5874bd6969070b205cfd76,
  name: 'Mala',
  maths_marks: 57,
  english_marks: 53,
  science_marks: 72 },
  { _id: 5a5874bd6969070b205cfd77,
  name: 'Vanu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85 },
  { _id: 5a5874bd6969070b205cfd79,
  name: 'Aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80 },
  { _id: 5a5874bd6969070b205cfd7a,
  name: 'Shayu',
  maths_marks: 80,
  english_marks: 76,
  science_marks: 65 },
  { _id: 5a5874bd6969070b205cfd7c,
  name: 'Lucky',
  maths_marks: 66,
  english_marks: 90,
  science_marks: 45 },
  { _id: 5a5874bd6969070b205cfd7d,
  name: 'Gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56 } ]
ukistu07@ukipc07:~/Desktop/mongo2$
```

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 uki = db.db("student");
  var myquery = {};
  var newvalues = {$set:{Average: " "}};
  uki.collection("studentmarks").updateMany(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log("Average Input");
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 4.js
Average Input
ukistu07@ukipc07:~/Desktop/mongo2$
```

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

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 4.js
Updated
ukistu07@ukipc07:~/Desktop/mongo2$
```

8)

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uki2 = db.db("student");
  uki2.collection("studentmarks").find({maths_marks:{$gt:50},english_marks:{$gt:50},english_marks:{$gt:50}}).toArray(function
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 5.js
```

```
[ { _id: 5a5874bd6969070b205cfd76,
  name: 'Mala',
  maths_marks: 57,
  english_marks: 53,
  science_marks: 72,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd77,
  name: 'Vanu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd79,
  name: 'Aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd7a,
  name: 'Shayu',
  maths_marks: 80,
  english_marks: 76,
  science_marks: 65,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd7c,
  name: 'Lucky',
  maths_marks: 66,
  english_marks: 90,
  science_marks: 75,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd7d,
  name: 'Gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56,
  Average: ' ' } ]
```

```
ukistu07@ukipc07:~/Desktop/mongo2$
```

9)

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uki2 = db.db("student");
  uki2.collection("studentmarks").find({$and:[{maths_marks:{$gt:50},english_marks:{$gt:50}}]}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 5.js
[ { _id: 5a5874bd6969070b205cfd76,
  name: 'Mala',
  maths_marks: 57,
  english_marks: 53,
  science_marks: 72,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd77,
  name: 'Vanu',
  maths_marks: 80,
  english_marks: 75,
  science_marks: 85,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd79,
  name: 'Aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd7a,
  name: 'Shayu',
  maths_marks: 80,
  english_marks: 76,
  science_marks: 65,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd7c,
  name: 'Lucky',
  maths_marks: 66,
  english_marks: 90,
  science_marks: 75,
  Average: ' ' },
  { _id: 5a5874bd6969070b205cfd7d,
  name: 'Gva',
  maths_marks: 71,
  english_marks: 75,
  science_marks: 56,
  Average: ' ' } ]
ukistu07@ukipc07:~/Desktop/mongo2$
```

10)

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uki2 = db.db("student");
  uki2.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();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 5.js
[]
ukistu07@ukipc07:~/Desktop/mongo2$
```

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

```
ukistu07@ukipc07:~/Desktop/mongo2$
ukistu07@ukipc07:~/Desktop/mongo2$ node 4.js
Deleted
ukistu07@ukipc07:~/Desktop/mongo2$
```

12)

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uki = db.db("student");
  var songs = [
    { name: 'John', maths_marks:87 , english_marks:23},
  ];
  uki.collection("studentmarks").insertMany(songs, function(err, res) {
    if (err) throw err;
    console.log("Number of documents inserted: " + res.insertedCount);
    db.close();
  });
});
```

```
ukistu07@ukipc07: ~/Desktop/mongo2$ node 3.js
Number of documents inserted: 1
ukistu07@ukipc07:~/Desktop/mongo2$
```

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 uki = db.db("student");
  var myquery = {name : "John"};
  var newvalues = {$rename:{english_marks: "science_marks"}};
  uki.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log("updated");
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 4.js
updated
ukistu07@ukipc07:~/Desktop/mongo2$
```


14)

```
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 uki = db.db("student");
  var myquery = {name : "Kumaran"};
  uki.collection("studentmarks").deleteOne(myquery, function(err, res) {
    if (err) throw err;
    console.log("deleted");
    db.close();
  });
});
```

```
ukistu07@ukipc07:~/Desktop/mongo2$ node 4.js
deleted
ukistu07@ukipc07:~/Desktop/mongo2$
```

15)

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var uk12 = db.db("student");
  uk12.collection("studentmarks").find({$or:[ {name:"Aruli"},{name:"Kala"}]}), {maths_marks: true , science_marks:true })
  .toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

```
[ { _id: 5a569123ec627d13d047fd63,
  name: 'Kala',
  maths_marks: 32,
  english_marks: 46,
  science_marks: 53,
  Average: '' },
  { _id: 5a569123ec627d13d047fd64,
  name: 'Aruli',
  maths_marks: 78,
  english_marks: 85,
  science_marks: 80,
  Average: '' } ]
```