1) Create a Database called student

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  console.log("Database created!");
  db.close();
});
```

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

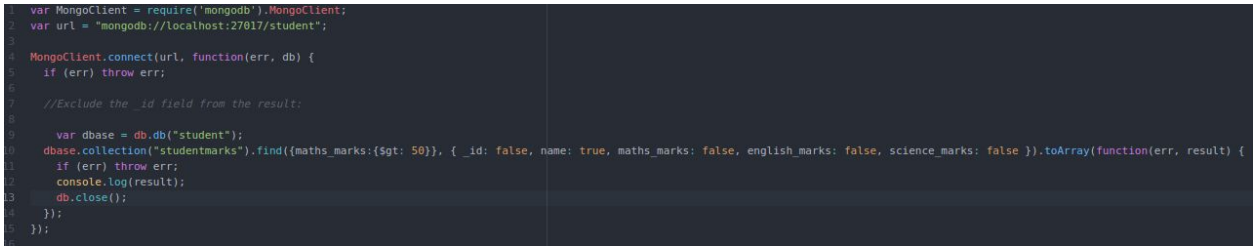
3) Create the documents listed in above table.

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var 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: 'Raam', maths_marks: 41, english_marks: 65, science_marks: 88},


  ];
  var dbase = db.db("student");

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

```

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 myquery = {  name: 'Mala' };
  var newvalues = {$inc: {maths_marks: 6} };

  var dbase = db.db("student");
  dbase.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log("1 document updated");
    db.close();
  });
});

```

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;

  //Exclude the _id field from the result:

    var dbase = db.db("student");
  dbase.collection("studentmarks").find({maths_marks:{$gt: 50}}, { _id: false, name: true, maths_marks: false, english_marks: false, science_marks: false }).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

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

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbase = db.db("student");
  var myquery = {};
  var newvalues = {$set: {Averge: ""} };
  dbase.collection("studentmarks").updateMany(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log(res.result.nModified + " document(s) updated");
    db.close();
  });
});
```

7) Update Marks_Science=75 to Lucky

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbase = db.db("student");
  var myquery = {name: 'Lucky'};
  var newvalues = {$set: {science_marks: 75} };
  dbase.collection("studentmarks").updateOne(myquery, newvalues, function(err, res) {
    if (err) throw err;
    console.log(res.result.nModified + " document(s) updated");
    db.close();
  });
});
```

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;

  //Exclude the _id field from the result:

    var dbase = db.db("student");
  dbase.collection("studentmarks").find({maths_marks:{$gt: 50},science_marks:{$gt: 50},english_marks:{$gt: 50}}, { _id: false, name: true}).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

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;

  //Exclude the _id field from the result:

    var dbase = db.db("student");
  dbase.collection("studentmarks").find({maths_marks:{$lt: 50},english_marks:{$gt: 50}}, { _id: false, name: true}).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;

  //Exclude the _id field from the result:

    var dbase = db.db("student");
  dbase.collection("studentmarks").find({maths_marks:{$lt: 40},science_marks:{$lt: 40}}, { _id: false, name: true}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});
```

11) Remove Science column/field for Raam

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbase = db.db("student");
  var myquery = { name: 'Raam' };
  var newvalues = { $unset:{science_marks: 88} };
  dbase.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.

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbase = db.db("student");
  var myobj = { name: 'Jhon', maths_marks: 87, english_marks: 23 };
  dbase.collection("studentmarks").insertOne(myobj, function(err, res) {
    if (err) throw err;
    console.log("1 document inserted");
    db.close();
  });
});
```

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

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

MongoClient.connect(url, function(err, db) {
  if (err) throw err;

  var myquery = {  name: 'Jhon' };
  var newvalues = {$rename: {english_marks: "science_marks"} };

  var dbase = db.db("student");
  dbase.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

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

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

  var myquery = { name: 'Kumaran' };
  dbase.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

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

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