

Exercise 2

1) Create a Database called student

```
ukipc11@ukipc11:~/Desktop/mongo ex2$ node q1.js
current Server Discovery and Monitoring engine is deprecated, and will be removed in a future version. To use the new Server Discovery and Monitoring engine, pass option { useUnifiedTopology: true } to the MongoClient constructor.
Database created!
```

2) Create a collection called studentmarks

```
ukipc11@ukipc11:~/Desktop/mongo ex2$ node q2.js
current Server Discovery and Monitoring engine is deprecated, and will be removed in a future version. To use the new Server Discovery and Monitoring engine, pass option { useUnifiedTopology: true } to the MongoClient constructor.
Collection created!
```

3) Create the documents listed in above table.

```
ukipc11@ukipc11:~/Desktop/mongo ex2$ node q3.js
current Server Discovery and Monitoring engine is deprecated, and will be removed in a future version. To use the new Server Discovery and Monitoring engine, pass option { useUnifiedTopology: true } to the MongoClient constructor.
Number of documents inserted: 9
```

4) Increase the maths marks of Mala by 6 marks

```
ukipc11@ukipc11:~/Desktop/mongo ex2$ node q4.js
current Server Discovery and Monitoring engine is deprecated, and will be removed in a future version. To use the new Server Discovery and Monitoring engine, pass option { useUnifiedTopology: true } to the MongoClient constructor.
[ { _id: 5e16baced46bf07d7aedb95b, mongo: { MongoClient: {
  name: 'mala', mongo: { MongoClient: {
    maths_marks: '46',
    english_marks: '53',
    science_marks: '72' } } }, url: function(err, db) {
  _id: 5e16bb47d46bf07d7aedb95c,
  name: 'vanu', db: db('student'),
  maths_marks: '80', 'studentmarks').find({}).toArray(function(err, result) {
    english_marks: '75',
    science_marks: '85' },
  { _id: 5e16bbacd46bf07d7aedb95d,
    name: 'kala',
    maths_marks: '32',
    english_marks: '46',
    science_marks: '53' },
  { _id: 5e16bc19d46bf07d7aedb95e,
    name: 'aruli',
    maths_marks: '78',
    english_marks: '85',
    science_marks: '80' },
  { _id: 5e16bc68d46bf07d7aedb95f,
    name: 'shayu',
    maths_marks: '80',
    english_marks: '76',
    science_marks: '65' },
  { _id: 5e16bca9d46bf07d7aedb960,
    name: 'kumaran',
    maths_marks: '32',
    english_marks: '73',
    science_marks: '84' },
  { _id: 5e16bce6d46bf07d7aedb961,
    name: 'lucky',
    maths_marks: '66',
    english_marks: '90',
    science_marks: 75 },
  { _id: 5e16bda0d46bf07d7aedb962,
    name: 'gva',
    maths_marks: '71',
    english_marks: '75',
```

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");
  dbo.collection("studentmarks").find({maths_marks:{$gt:50}}, { projection: { maths_marks: 0 }}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});

```

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

7) Update Marks_Science=75 to Lucky .

```

uklpc11@uklpc11:~/Desktop/mongo ex2$ node q7.js
current Server Discovery and Monitoring engine is deprecated, and will be removed in a future version. To use the new Server Discover and Monitoring engine, pass option { useUnifiedTopology: true } to the MongoClient constructor.
1 document updated
uklpc11@uklpc11:~/Desktop/mongo ex2$

```

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

```

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({maths_marks:{$gt:50}}, { projection: { maths_marks: 0 }}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});

```

```

uklpc11@uklpc11:~/Desktop/mongo ex2$ node q8.js
current Server Discovery and Monitoring engine is deprecated, and will be removed in a future version. To use the new Server Discover and Monitoring engine, pass option { useUnifiedTopology: true } to the MongoClient constructor.
[]
uklpc11@uklpc11:~/Desktop/mongo ex2$

```

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.

```

MongoClient = require('mongodb').MongoClient;
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:{$lt:40}}, {english_marks:{$lt:40}}]}).toArray(function(err, result) {
    if (err) throw err;
    console.log(result);
    db.close();
  });
});

```

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

```

uklpc11@uklpc11:~/Desktop/mongo ex2$ node q13.js
current Server Discovery and Monitoring engine is deprecated, and will be removed in a future version. To use the new Server Discover and Monitoring engine, pass option { useUnifiedTopology: true } to the MongoClient constructor.
1 document updated
uklpc11@uklpc11:~/Desktop/mongo ex2$

```

- 14) Remove Kumaran's document from collection
- 15) Find Kala's or Aruli's math_marks and science_marks

Note - Make sure all your answer screenshots are pretty.