1)   Create a Database called student

```
> use student
switched to db student
> db
student
```

2)   Create a collection called studentmarks

```
> db.createCollection("studentmarks")
{ "ok" : 1 }
```

3)   Create the documents listed in above table.

```
2019-06-27T10:10:15.075+0530 SyntaxError: Unexpected string
> db.student.insert([{"name":"Mala","maths_marks":45,"english_marks":53,"science
_marks":72},{"name":"Vanu","maths_marks":80,"english_marks":75,"science_marks":8
5},{"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","mat
hs_marks":32,"english_marks":73,"science_marks":84},{"name":"Lucky","maths_marks
":66,"english_marks":90,"science_marks":45},{"name":"Gva","maths_marks":71,"engl
ish_marks":75,"science_marks":56},{"name":"Raam","maths_marks":41,"english_marks
":65,"science_marks":88}])
BulkWriteResult({
        "writeErrors" : [ ],
        "writeConcernErrors" : [ ],
        "nInserted" : 9,
        "nUpserted" : 0,
        "nMatched" : 0,
        "nModified" : 0,
        "nRemoved" : 0,
        "upserted" : [ ]
})
```

4)   Increase the maths marks of Mala by 6 marks

```
> db.studentmarks.update({"name":"Mala"},{$inc:{"maths_marks":+6}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

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

```
> db.studentmarks.find({"maths_marks":{$gt:50}},{"_id":0,"name":1}).pretty()
{ "name" : "Mala" }
{ "name" : "Vanu" }
{ "name" : "Aruli" }
{ "name" : "Shayu" }
{ "name" : "Lucky" }
{ "name" : "Gva" }
```

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

```
...
> db.getCollection('studentmarks').update({},{$set:{"Average":""}},false,true)
WriteResult({ "nMatched" : 9, "nUpserted" : 0, "nModified" : 9 })
> db.studentmarks.find() pretty()
```

7)   Update Marks_Science=75 to Lucky .

```
> db.studentmarks.update({"science_marks":45},{$set:{"science_marks":75}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
>
```

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

```
> db.studentmarks.find({"maths_marks":{$gt:50},"science_marks":{$gt:50},"english
_marks":{$gt:50}},{"_id":0,"name":1}).pretty()
{ "name" : "Mala" }
{ "name" : "Vanu" }
{ "name" : "Aruli" }
{ "name" : "Shayu" }
{ "name" : "Lucky" }
{ "name" : "Gva" }
```

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

```
> db.studentmarks.find({"maths_marks":{$lt:50},"english_marks":{$gt:50}},{"_id":
0,"name":1}).pretty()
{ "name" : "Kumaran" }
{ "name" : "Raam" }
```

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

```
> db.studentmarks.find({"maths_marks":{$lt:40},"science_marks":{$lt:40}},{"_id":
0,"name":1}).pretty()
>
```

11) Remove Science column/field for Raam

```
> db.studentmarks.update({"name":"Raam"},{$unset:{"science_marks":75}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

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

```
> db.studentmarks.insert({"maths_marks":87,"english_marks":23},{upsert:true})
WriteResult({ "nInserted" : 1 })
>
```

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

```
> db.studentmarks.update( {"_id" : ObjectId("5d1486e45a6620891ccdea2a") }, { $re
name: { 'english_marks': 'science_marks' } } )
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

14) Remove Kumaran's document from collection

```
> db.studentmarks.remove({"name":"Kumaran"})
WriteResult({ "nRemoved" : 1 })
>
```

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

```
> db.studentmarks.find({$or:[{"name":"Kala"},{"name":"Aruli"}]},{"maths_marks":1
,"science_marks":1,"_id":0})
{ "maths_marks" : 32, "science_marks" : 53 }
{ "maths_marks" : 78, "science_marks" : 80 }
>
```