

1) Create a Database called student

```
> show dbs
admin    0.000GB
config  0.000GB
local    0.000GB
music    0.000GB
ukis     0.000GB
> use student
switched to db student
```

2) Create a collection called studentmarks

```
> show collections
studentmarks
> use studentmarks
switched to db studentmarks
```

3) Create the documents listed in above table.

```
use studentmarks
> insert([{"name": "Mala", "maths_marks": 51, "english_marks": 53, "science_marks": 72}, {"name": "Vanu", "maths_marks": 80, "english_marks": 75, "science_marks": 85}, {"name": "Arull", "maths_marks": 78, "english_marks": 85, "science_marks": 80}, {"name": "Shayu", "maths_marks": 80, "english_marks": 76, "science_marks": 65}, {"name": "Lucky", "maths_marks": 66, "english_marks": 90, "science_marks": 45}, {"name": "Cva", "maths_marks": 71, "english_marks": 75, "science_marks": 56}])
WriteResult({ "nInserted" : 6 })
```

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" : ObjectId("5d1455d8947197dc814f6247"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
{ "_id" : ObjectId("5d1455f4947197dc814f6248"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("5d14568a947197dc814f624c"), "name" : "Arull", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("5d1456bb947197dc814f624d"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("5d1456f1947197dc814f624f"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "science_marks" : 45 }
{ "_id" : ObjectId("5d145708947197dc814f6250"), "name" : "Cva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
```

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

```
@(shell):1:1
> db.studentmarks.update({},{$set:{average:1}},false,true)
WriteResult({ "nMatched" : 9, "nUpserted" : 0, "nModified" : 9 })
```

7) Update Marks\_Science=75 to Lucky

```
@(shell):1:25
> db.studentmarks.update({name:"Lucky"},{$set:{science_marks:75}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

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

```
use studentmarks
> find({'maths_marks':{'gt':50},{'english_marks':{'gt':50},{'science_marks':{'gt':50}}}
{ "_id" : ObjectId("5d1455d8947197dc814f6247"), "name" : "Mala", "maths_marks" : 51, "english_marks" : 53, "science_marks" : 72 }
{ "_id" : ObjectId("5d1455f4947197dc814f6248"), "name" : "Vanu", "maths_marks" : 80, "english_marks" : 75, "science_marks" : 85 }
{ "_id" : ObjectId("5d14568a947197dc814f624c"), "name" : "Arull", "maths_marks" : 78, "english_marks" : 85, "science_marks" : 80 }
{ "_id" : ObjectId("5d1456bb947197dc814f624d"), "name" : "Shayu", "maths_marks" : 80, "english_marks" : 76, "science_marks" : 65 }
{ "_id" : ObjectId("5d1456f1947197dc814f624f"), "name" : "Lucky", "maths_marks" : 66, "english_marks" : 90, "science_marks" : 45 }
{ "_id" : ObjectId("5d145708947197dc814f6250"), "name" : "Cva", "maths_marks" : 71, "english_marks" : 75, "science_marks" : 56 }
```

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

```
2019-08-27T13:11:59.380+0530 E QUERY [thread1] SyntaxError: Missing ; before statement @shell:1:151
> db.studentmarks.find({'maths_marks':{'lt:50'},{'english_marks':{'gt:50'}}},{_id:0,maths_marks:0,science_marks:0,english_marks:0}).pretty()
{
  "name" : "Kunaran"
}
{
  "name" : "Raam"
}
>
```

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

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

11) Remove Science column/field for Raam

```
2019-08-27T13:12:01.251+0530 E QUERY [thread1] SyntaxError: Missing ; before statement @shell:1:151
> db.studentmarks.find({'name':'Raam'})
{
  "name" : "Raam",
  "maths_marks" : 30,
  "science_marks" : 40,
  "english_marks" : 50
}
>
```

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

```
db.studentmarks.update({"_id" : ObjectId("5d1484ba947197dc814f6253")}, {"$set: {"math_marks": 87, "english_marks": 23}}, {"upsert": true})
```

13) Rename the english\_marks column/field for John to science\_marks

```
> db.studentmarks.update({"_id" : ObjectId("5d1484ba947197dc814f6253")}, {"$rename: {"english_marks": "science_marks"}})  
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })  
>
```

14) Remove Kumaran's document from collection

```
db.studentmarks.remove({"_id" : ObjectId("5d1484ba947197dc814f6253")})  
WriteResult({ "n" : 1 })  
db.studentmarks.find().pretty()
```

15) Find Kala's or Aruli's math\_marks and science\_marks

```
db.studentmarks.find({"name": "Kala"}, {"_id": 0, "math_marks": 1, "science_marks": 1}).pretty()  
db.studentmarks.find({"name": "Aruli"}, {"_id": 0, "math_marks": 1, "science_marks": 1}).pretty()
```







