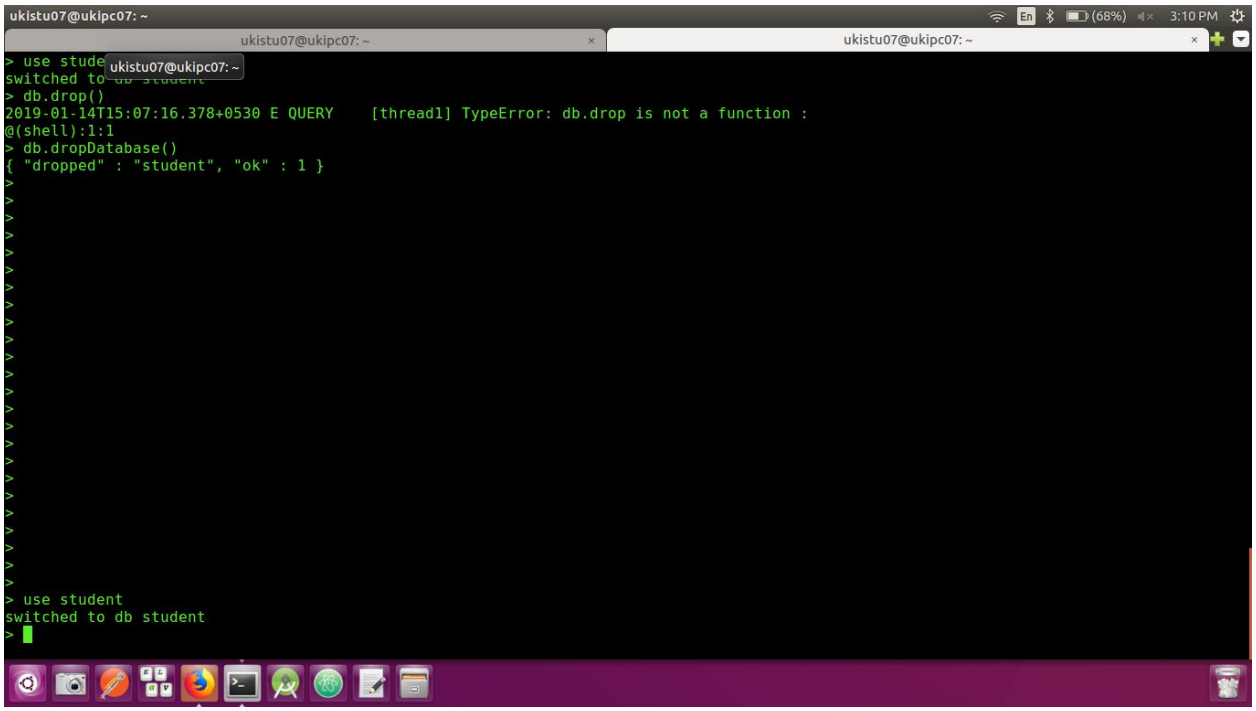
MongoDB Exercice 2

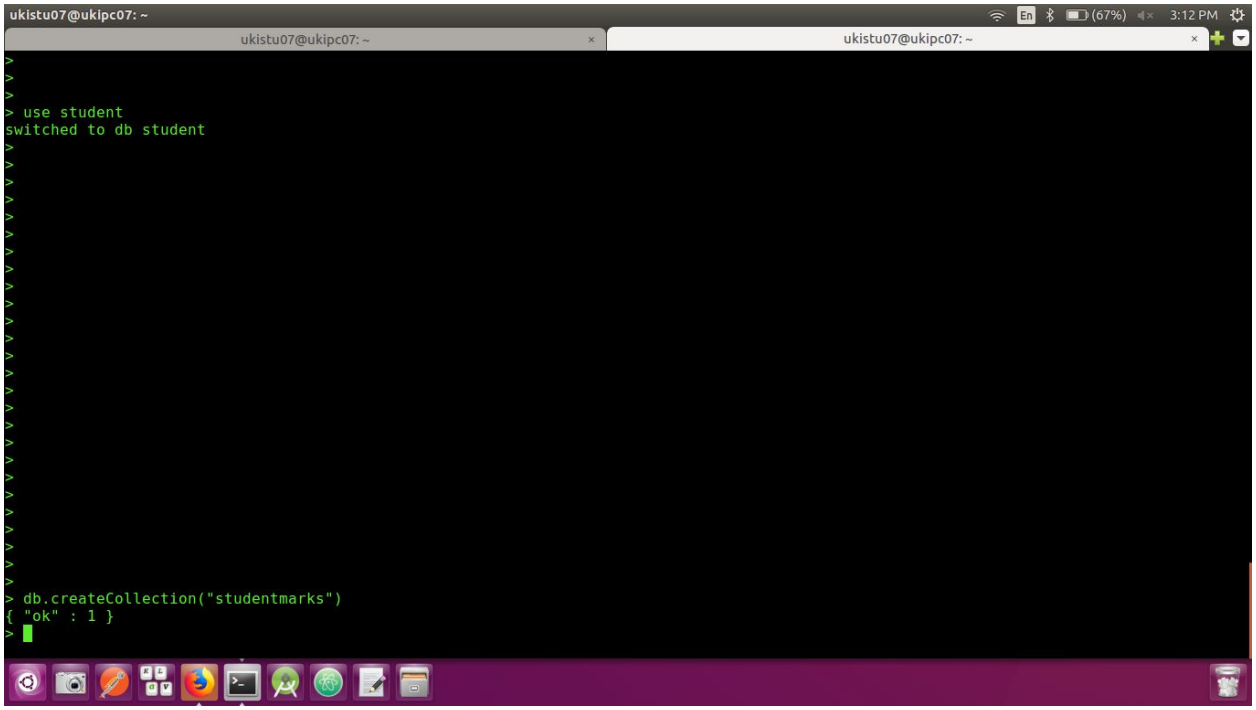
1) Create a Database called student

> use student



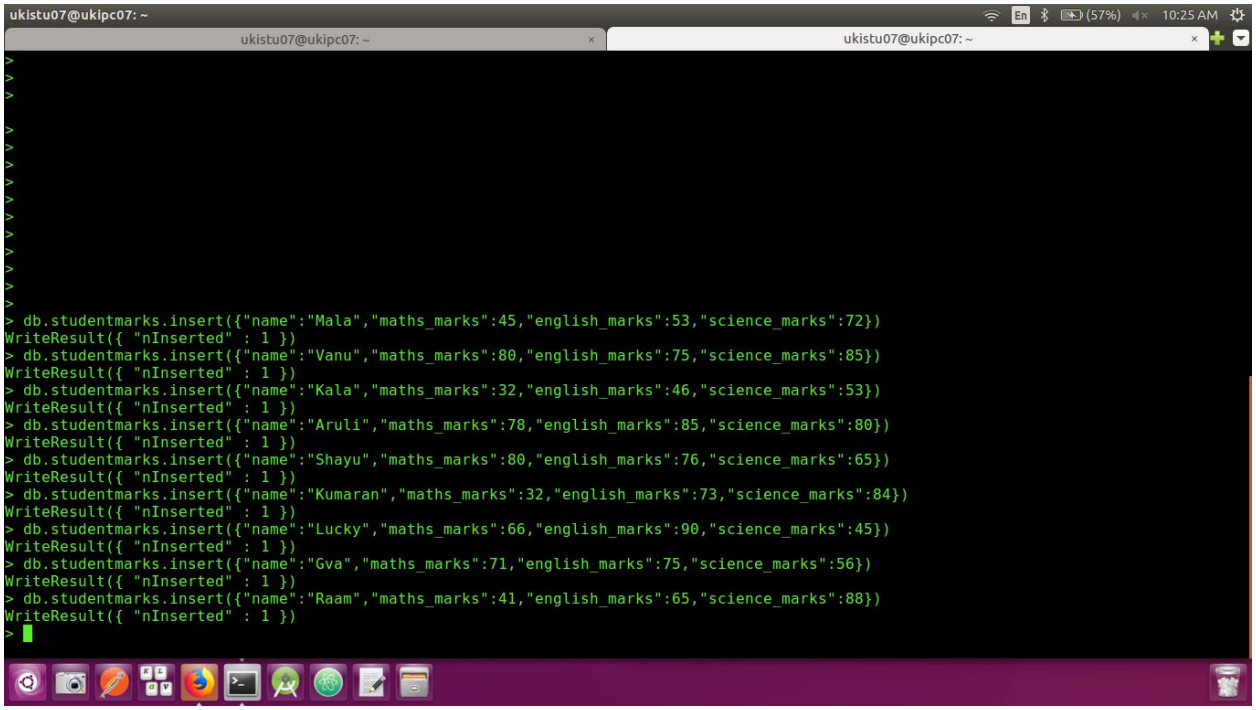
2) Create a collection called studentmarks

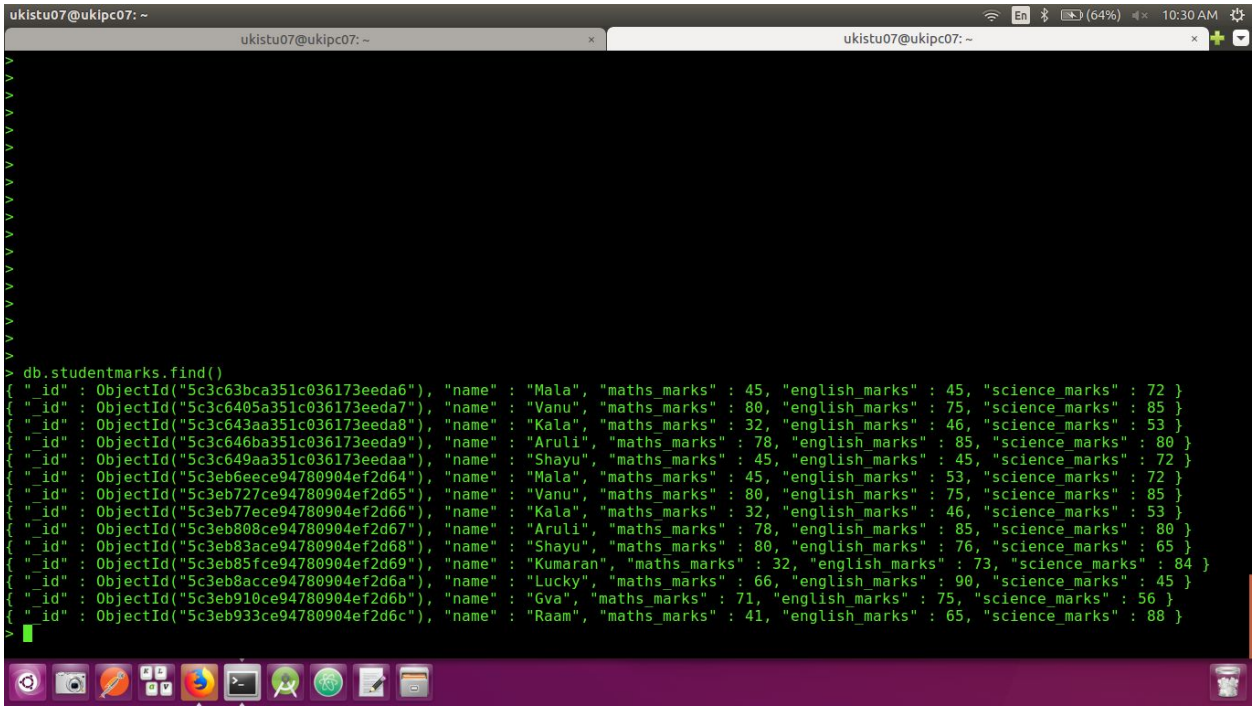
> db.createCollection("studentmarks")



3) Create the documents listed in above table.>
db.studentmarks.insert({"name":"Mala","maths_marks":45,
"english_marks":53,"science_marks":72})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"Vanu","maths_marks":80,
"english_marks":75,"science_marks":85})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"Kala","maths_marks":32,"
english_marks":46,"science_marks":53})
WriteResult({ "nInserted" : 1 })

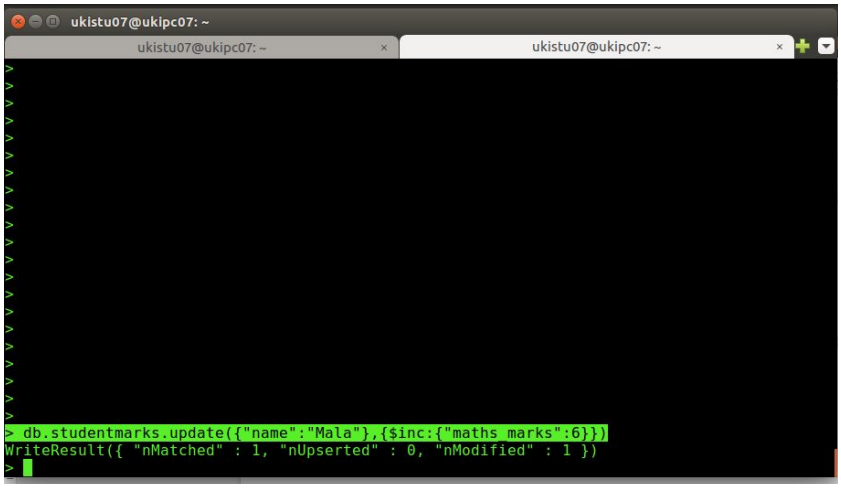
```
>
db.studentmarks.insert({"name":"Aruli","maths_marks":78,"
english_marks":85,"science_marks":80})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"Shayu","maths_marks":8
0,"english_marks":76,"science_marks":65})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"Kumaran","maths_marks
":32,"english_marks":73,"science_marks":84})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"Lucky","maths_marks":66
,"english_marks":90,"science_marks":45})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"Gva","maths_marks":71,"
english_marks":75,"science_marks":56})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"Raam","maths_marks":4
1,"english_marks":65,"science_marks":88})
WriteResult({ "nInserted" : 1 })
>
```





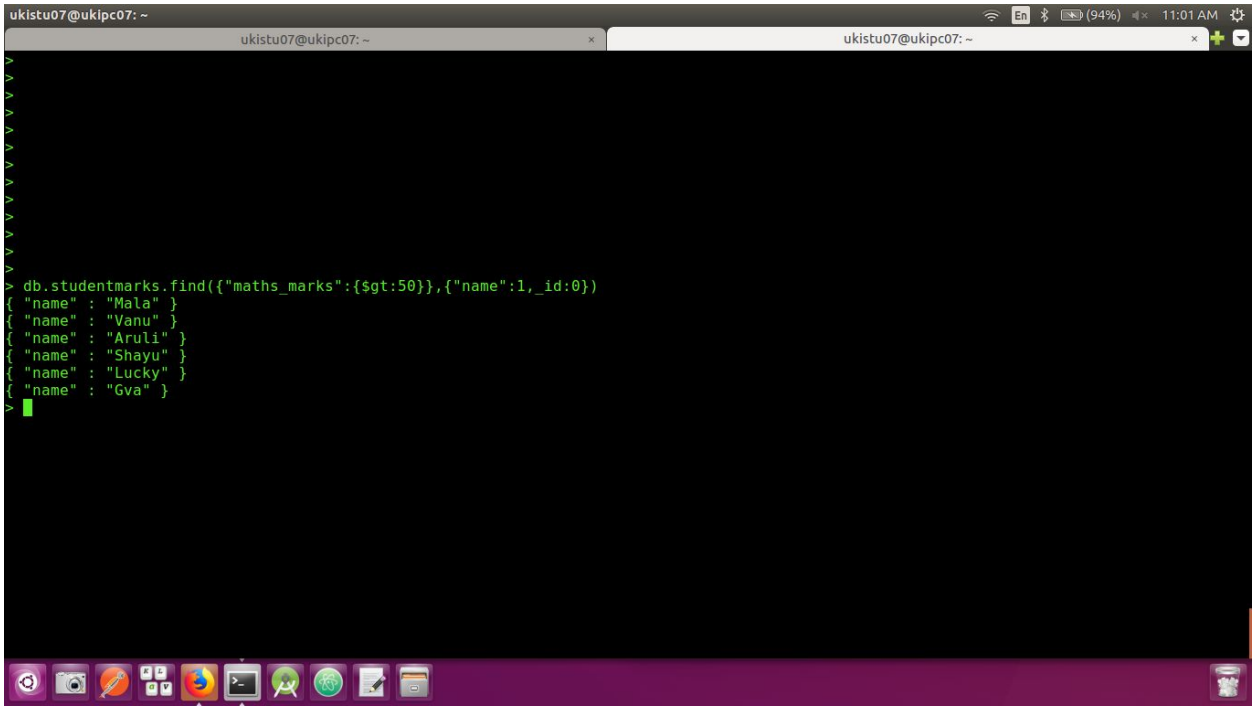
4) Increase the maths marks of Mala by 6 marks

>
db.studentmarks.update({"name":"Mala"},{$inc:{"maths_marks":6}})



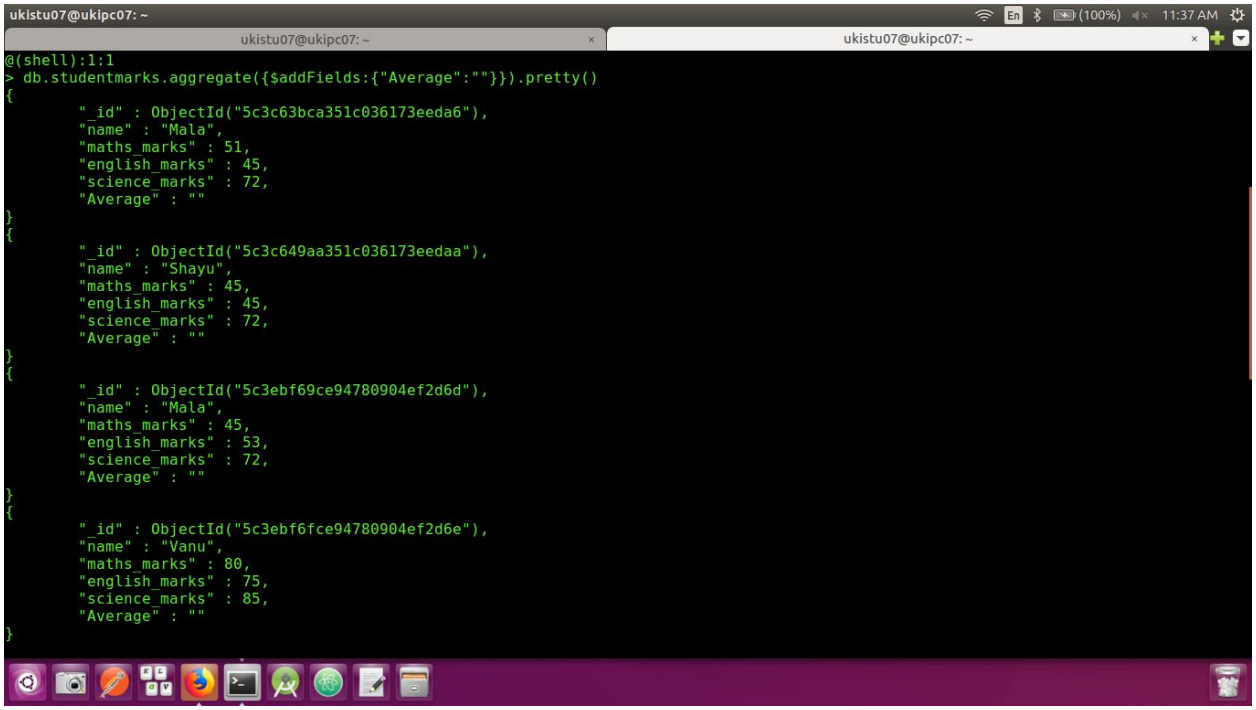
5) List the names of students who got more than 50 marks in Maths Subject.

>
db.studentmarks.find({"maths_marks":{$gt:50}},{"name":1,_id:0})



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

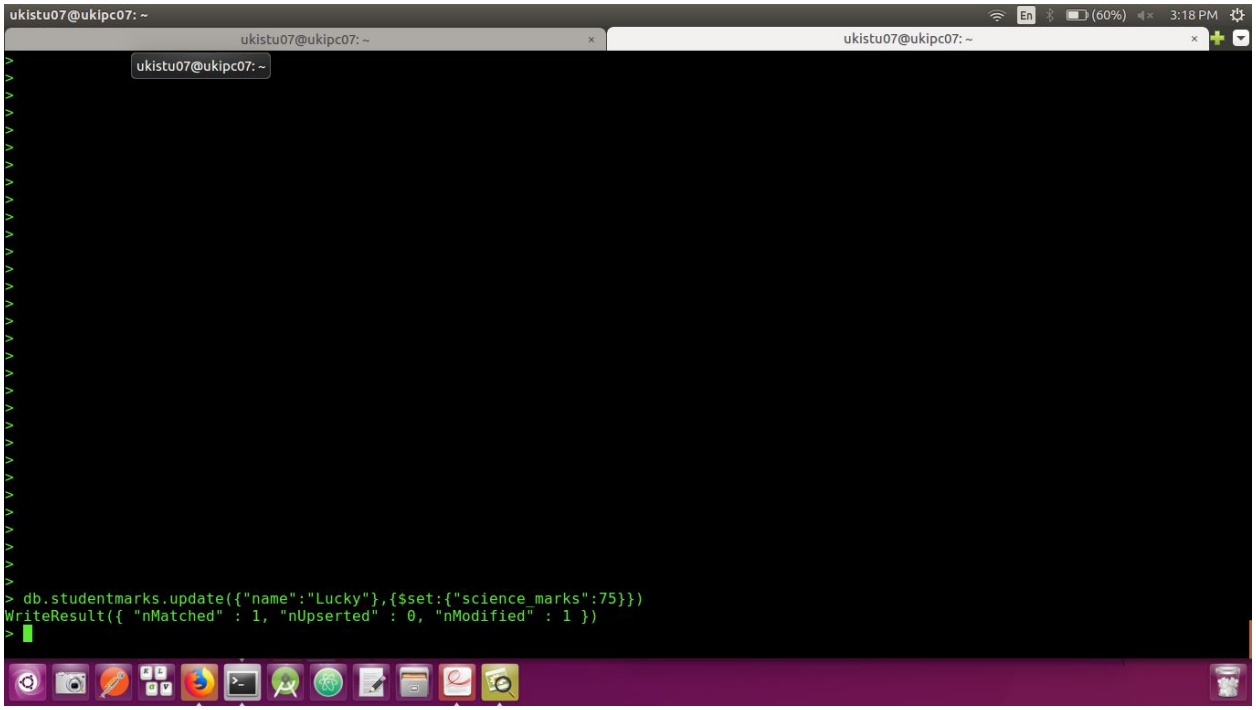
> db.studentmarks.aggregate({$addFields:{"Average":""}}).pretty()



7) Update Marks_Science=75 to Lucky .

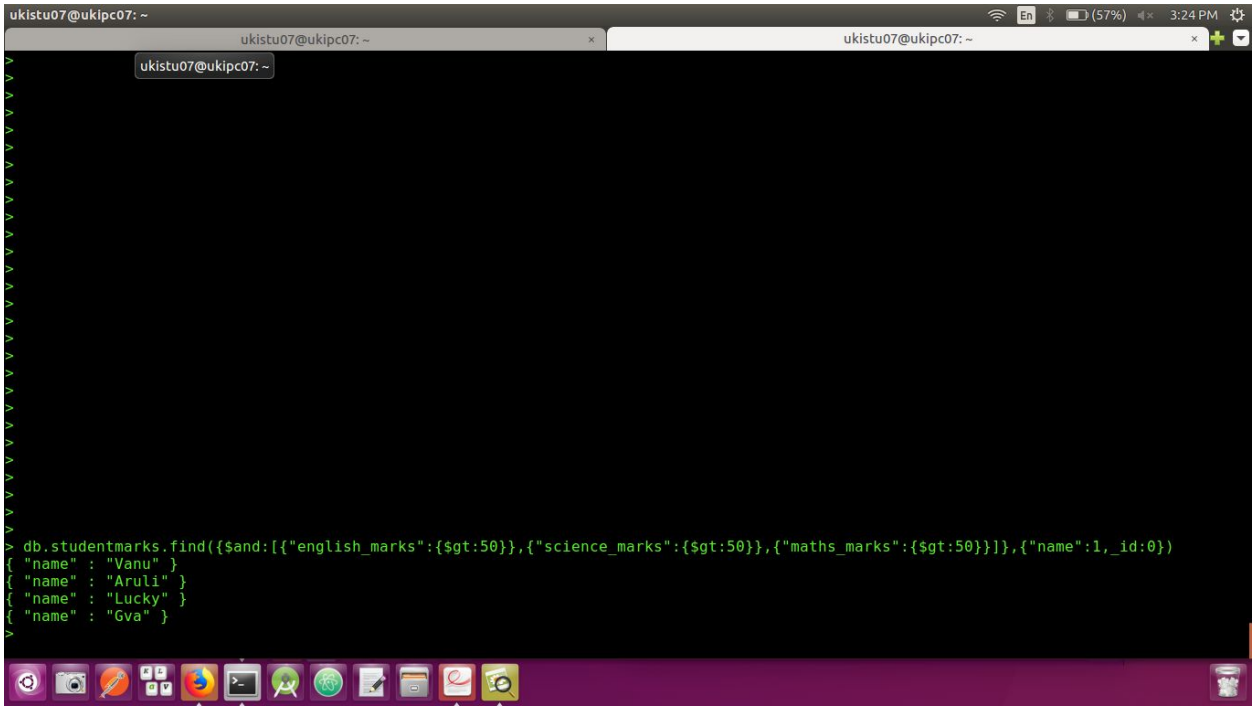
>

db.studentmarks.update({"name":"Lucky"},{$set:{"science_marks":75}})



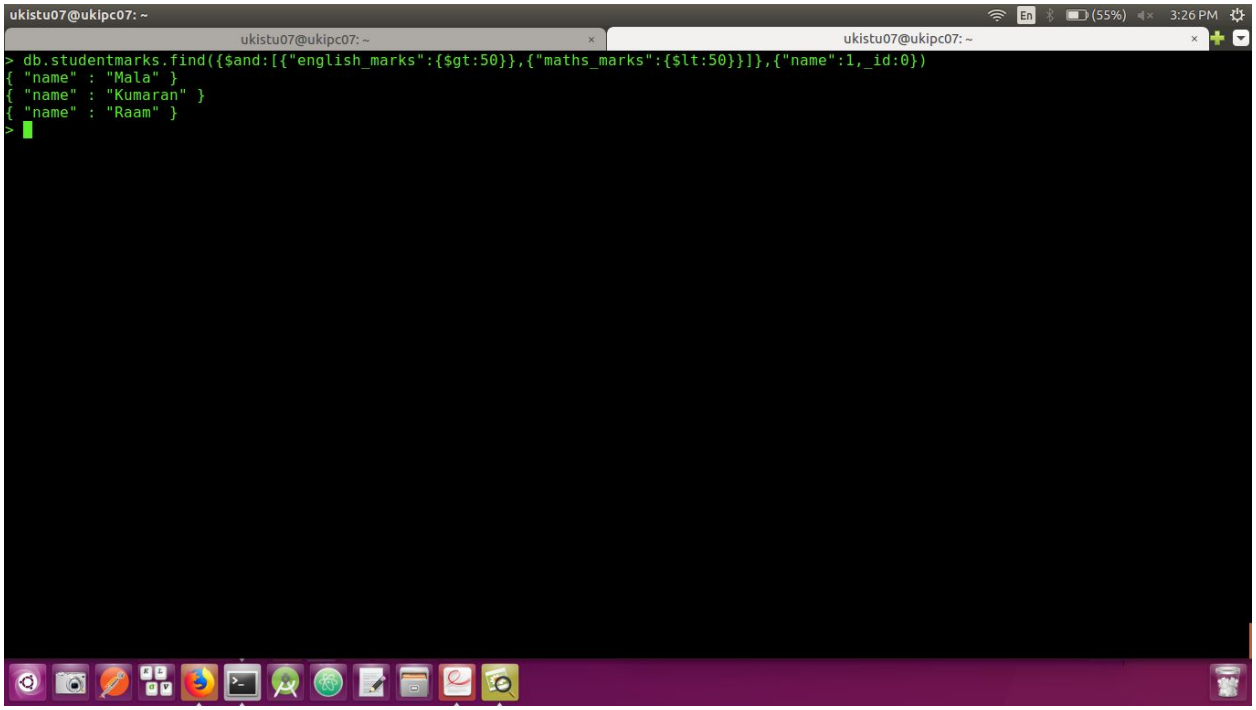
8) List the names who got more than 50 marks in all subjects.

db.studentmarks.find({$and:[{"english_marks":{$gt:50}},{"science_marks":{$gt:50}},{"maths_marks":{$gt:50}}]},{"name":1,_id:0})



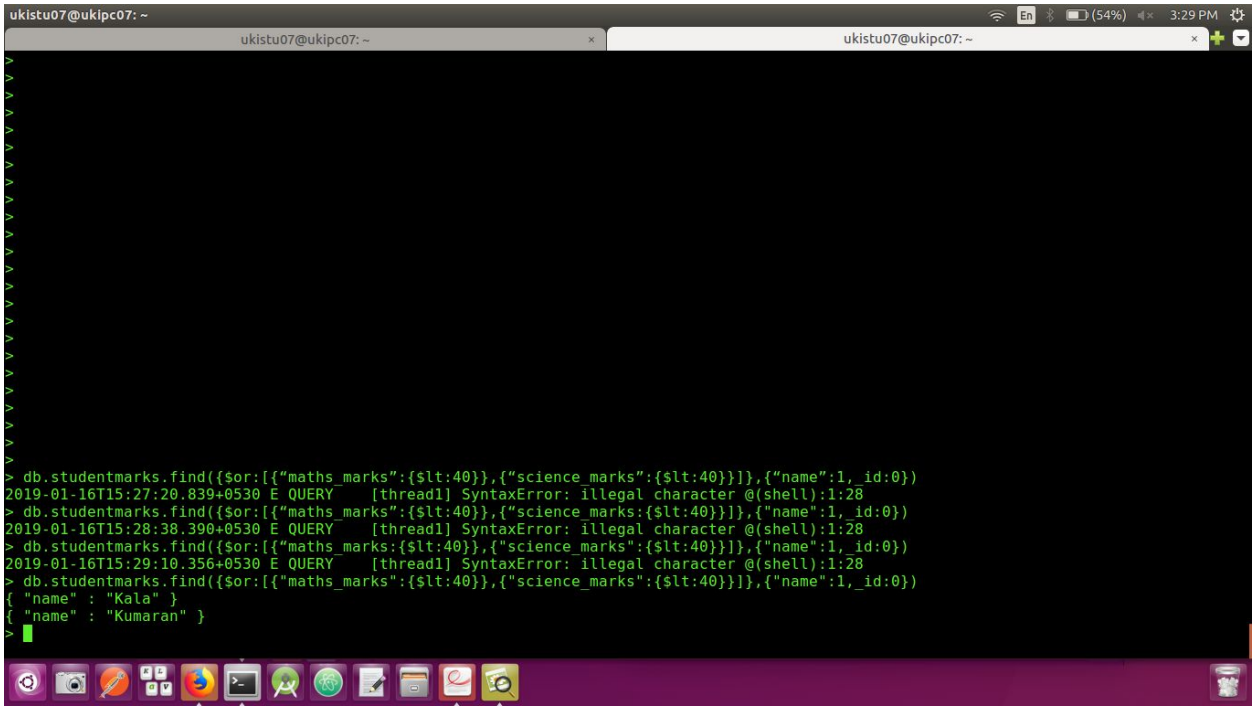
9) List the names who got less than 50 marks in Maths subject and more than 50 marks in English

db.studentmarks.find({$and:[{"english_marks":{$gt:50}},{"maths_marks":{$lt:50}}]},{"name":1,_id:0})



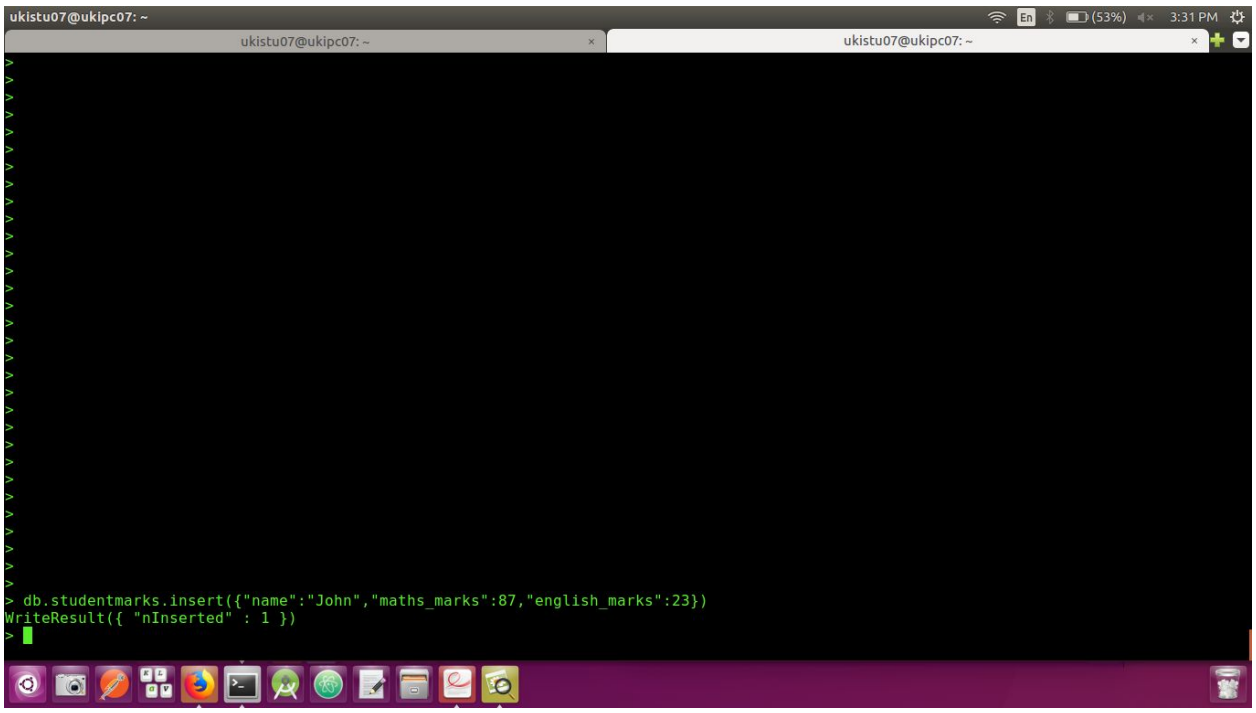
10) List the names who got less than 40 in both Maths and Science.

db.studentmarks.find({$or:[{"maths_marks":{$lt:40}},{"science_marks":{$lt:40}}]},{"name":1,_id:0})



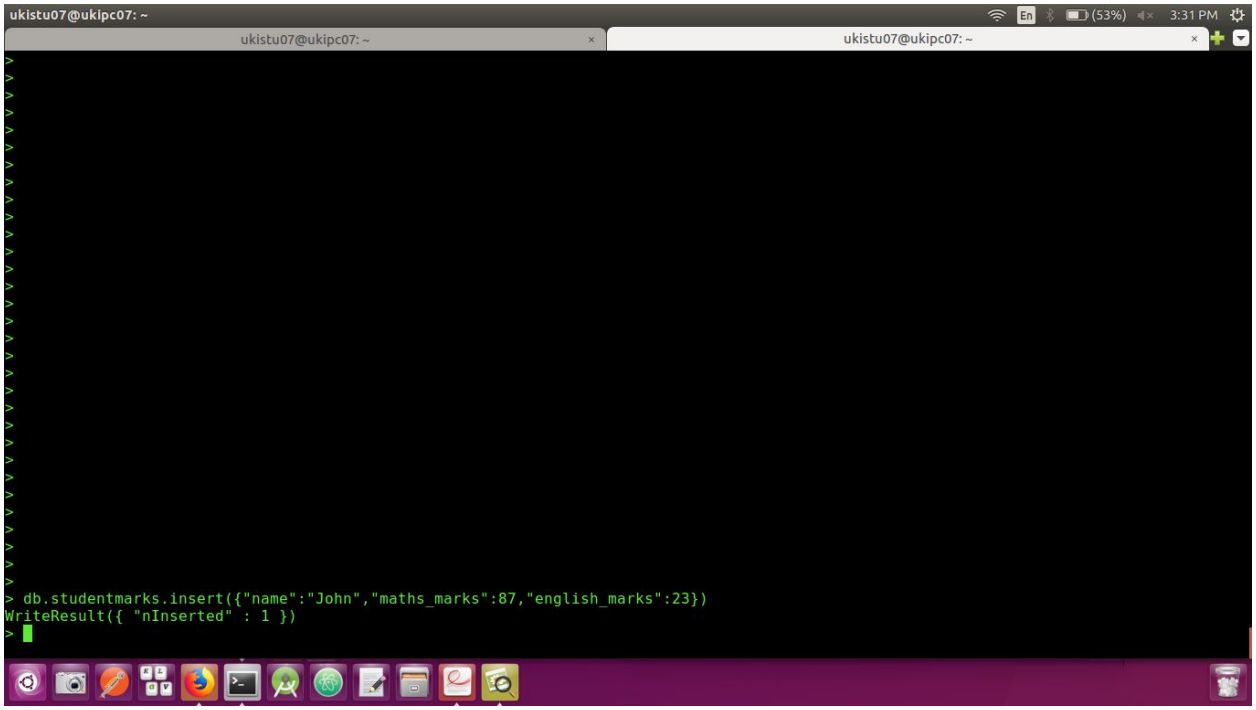
11) Remove Science column/field for Raam

db.studentmarks.update({"name":"Raam"},{$unset:{"science_marks":88}})



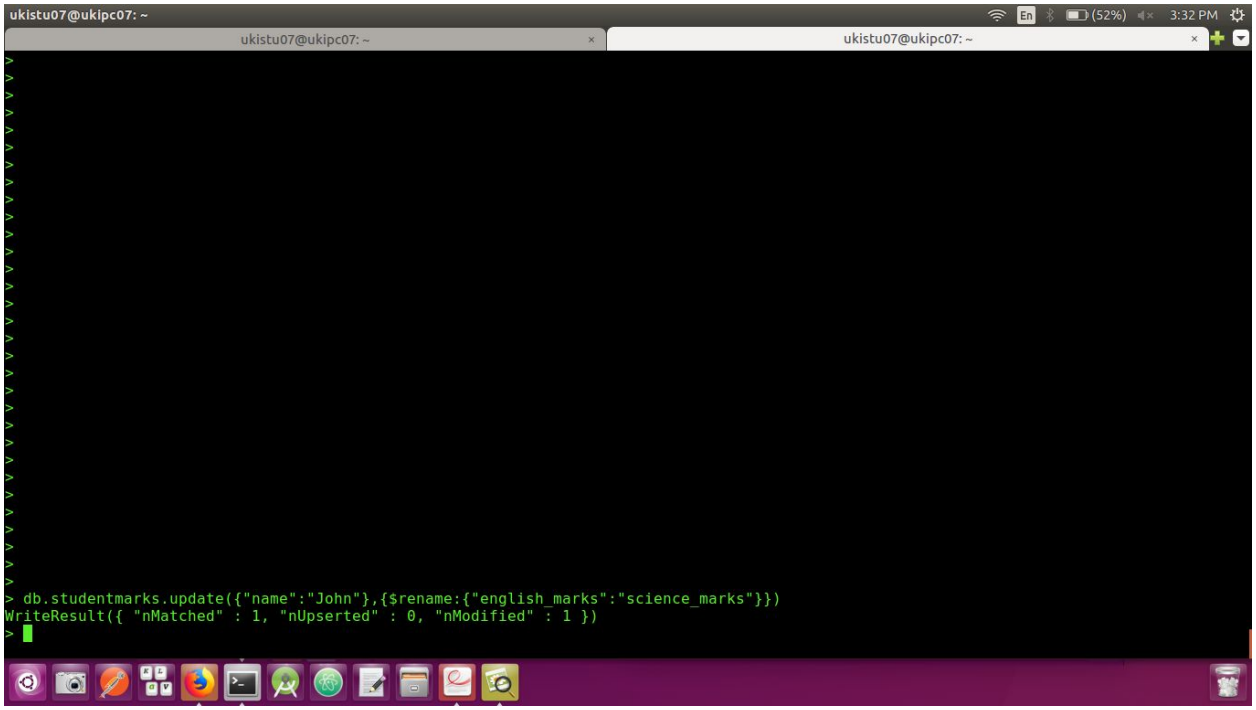
12) Update John’s Math mark as 87 and English mark as 23, if john not available upsert.

db.studentmarks.insert({"name":"John","maths_marks":87,"english_marks":23})



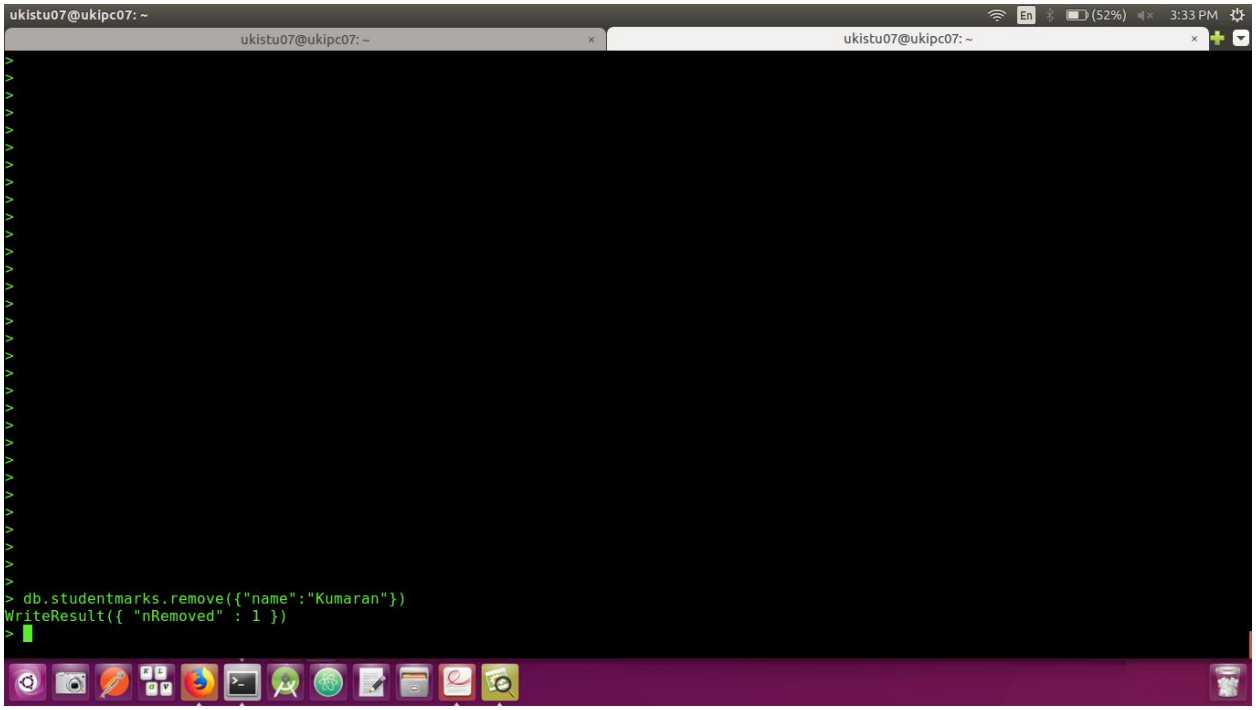
13) Rename the english_marks column/field for John to science_marks

db.studentmarks.update({"name":"John"},{$rename:{"english_marks":"science_marks"}})



14) Remove Kumaran's document from collection

db.studentmarks.remove({"name":"Kumaran"})



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}).pretty()
```