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":43,"science_marks":72})

>db.studentmarks.insert({“name”:“Vanu”,“maths_marks":80",english_marks":75,"science_marks":85})

>db.studentmarks.insert({"name":"Kala","maths_marks":32,"english_marks":46,"science_marks":53})

>db.studentmarks.insert({"name":"Aruli","maths_marks":78,"english_marks":85,"science_marks":80})

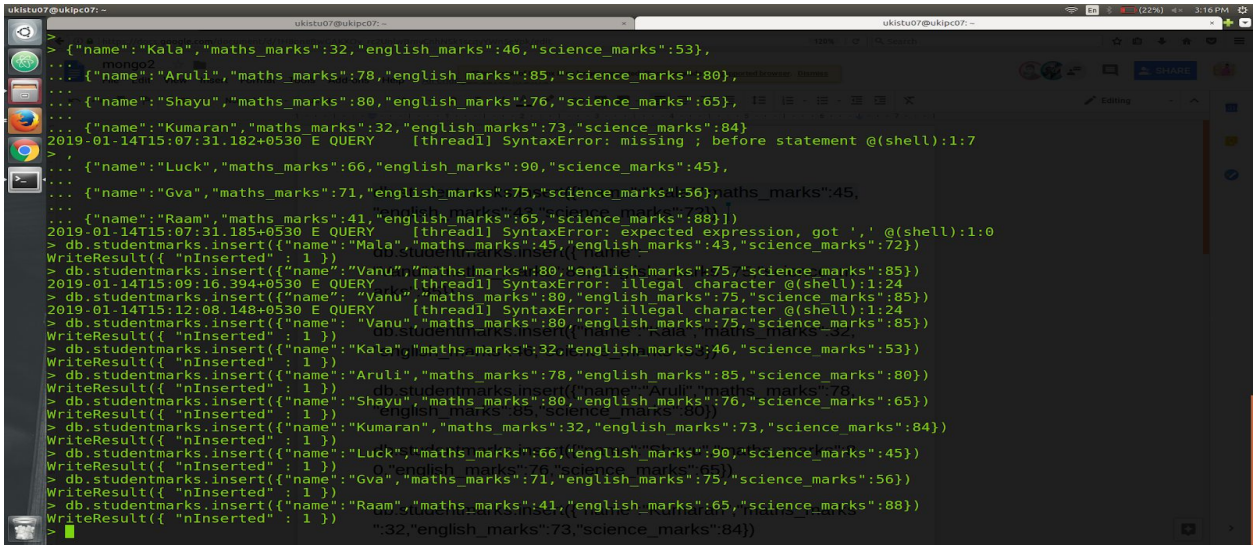
>db.studentmarks.insert({"name":"Shayu","maths_marks":80,"english_marks":76,"science_marks":65})

db.studentmarks.insert({"name":"Kumaran","maths_marks":32,"english_marks":73,"science_marks":84})

db.studentmarks.insert({"name":"Lucky","maths_marks":66,"english_marks":90,"science_marks":45})

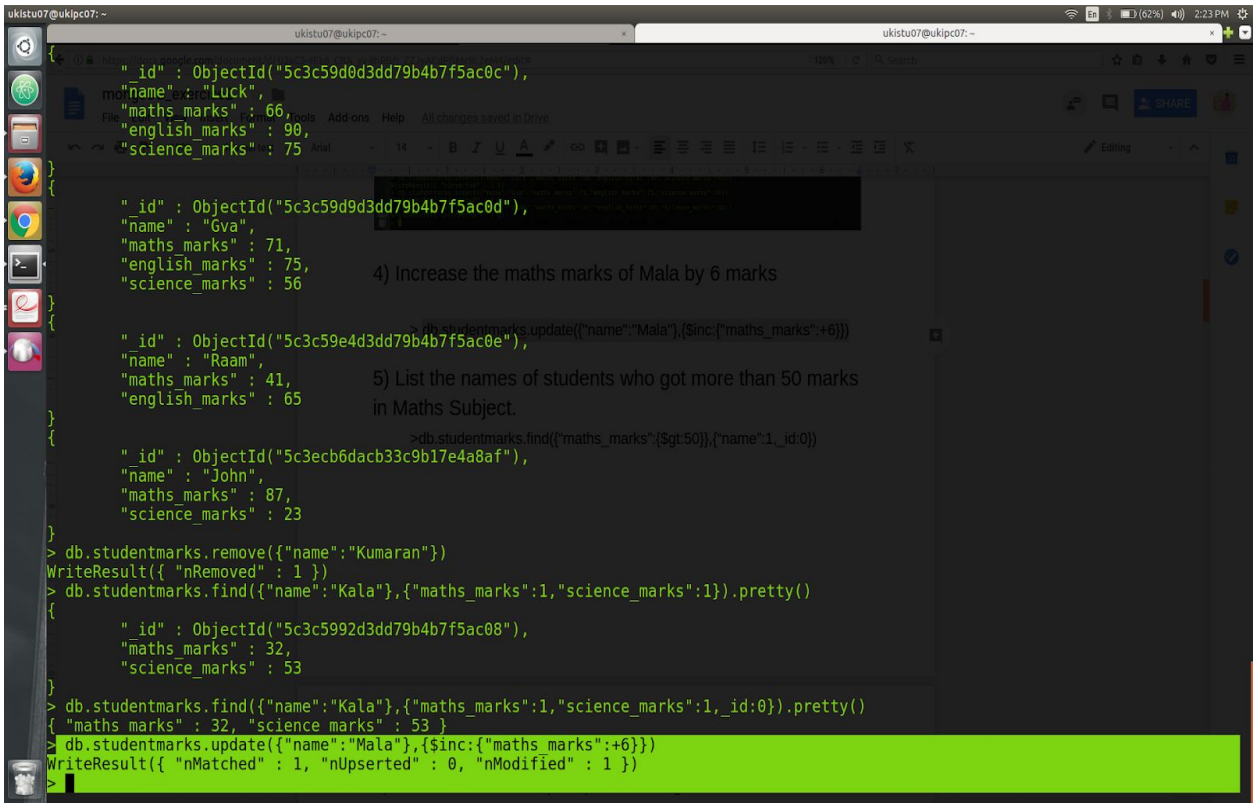
db.studentmarks.insert({"name":"Gva","maths_marks":71,"english_marks":75,"science_marks":56})

db.studentmarks.insert({"name":"Raam","maths_marks":41,"english_marks":65,"science_marks":88})



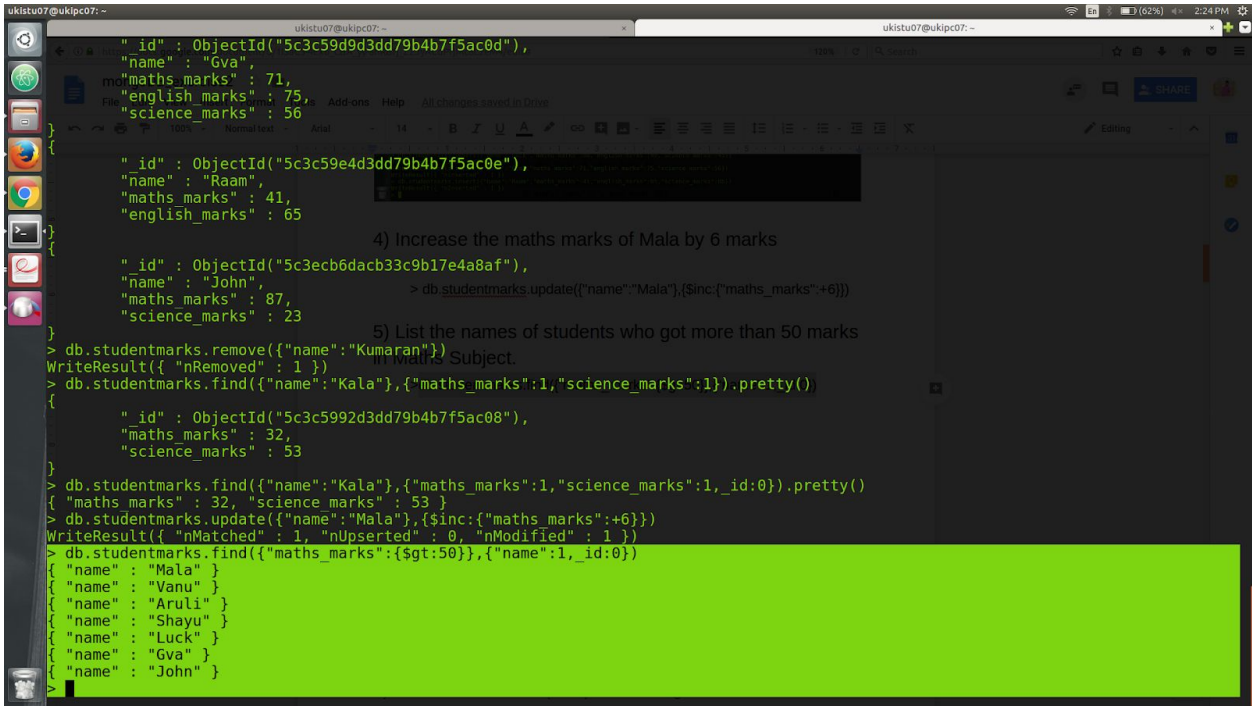
4) Increase the maths marks of Mala by 6 marks

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



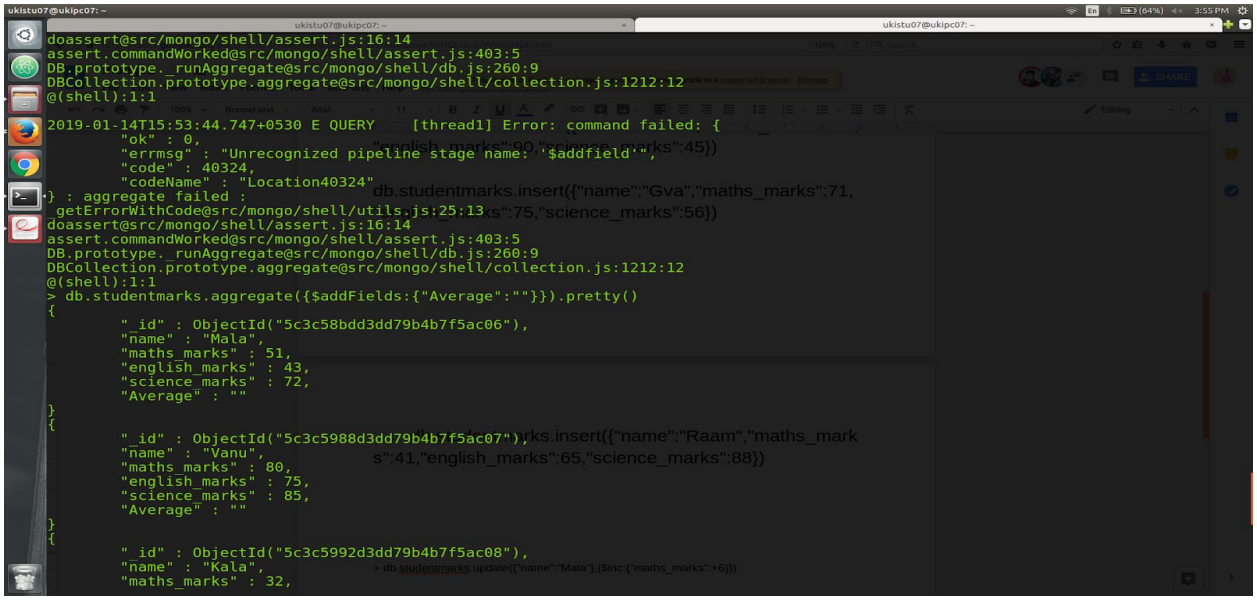
5) List the names of students who got more than 50 marks in Maths Subject.

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



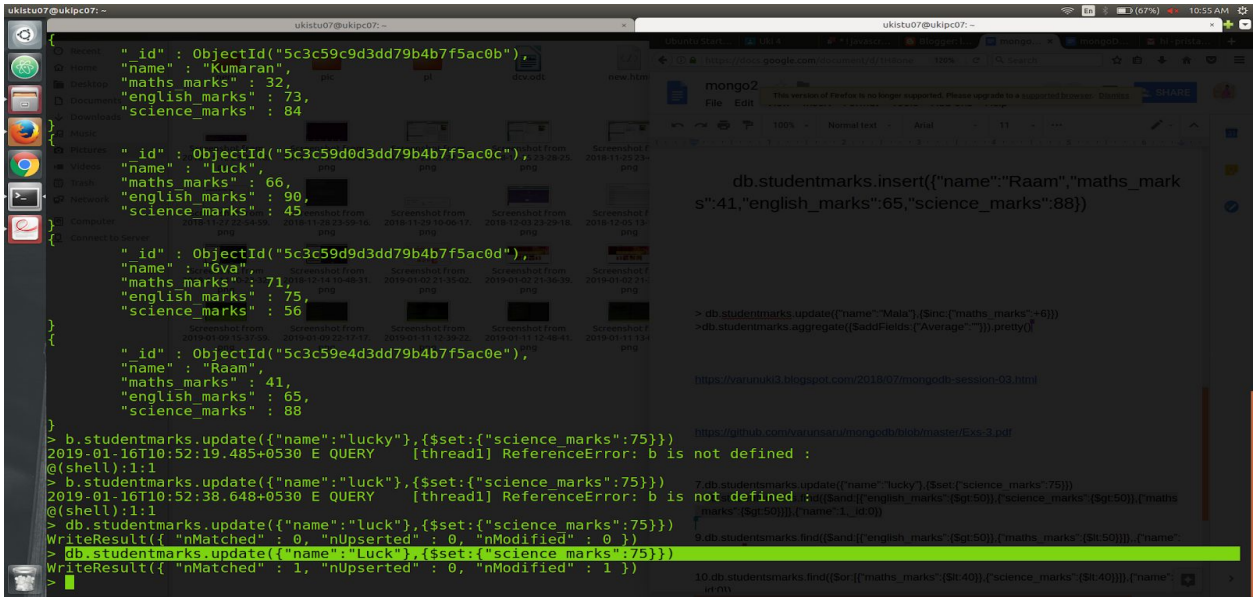
6)Add a new column(field) for Average for all students.

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



7) Update Marks_Science=75 to Lucky .

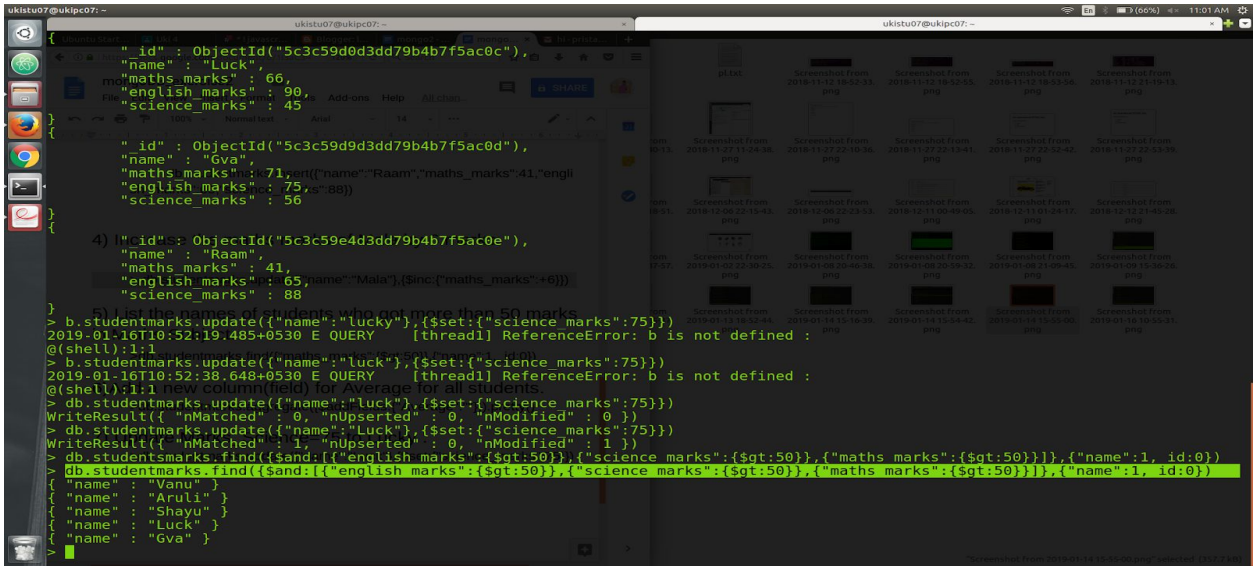
>db.studentmarks.update({"name":"Luck"},{$set:{"science_marks":75}})



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

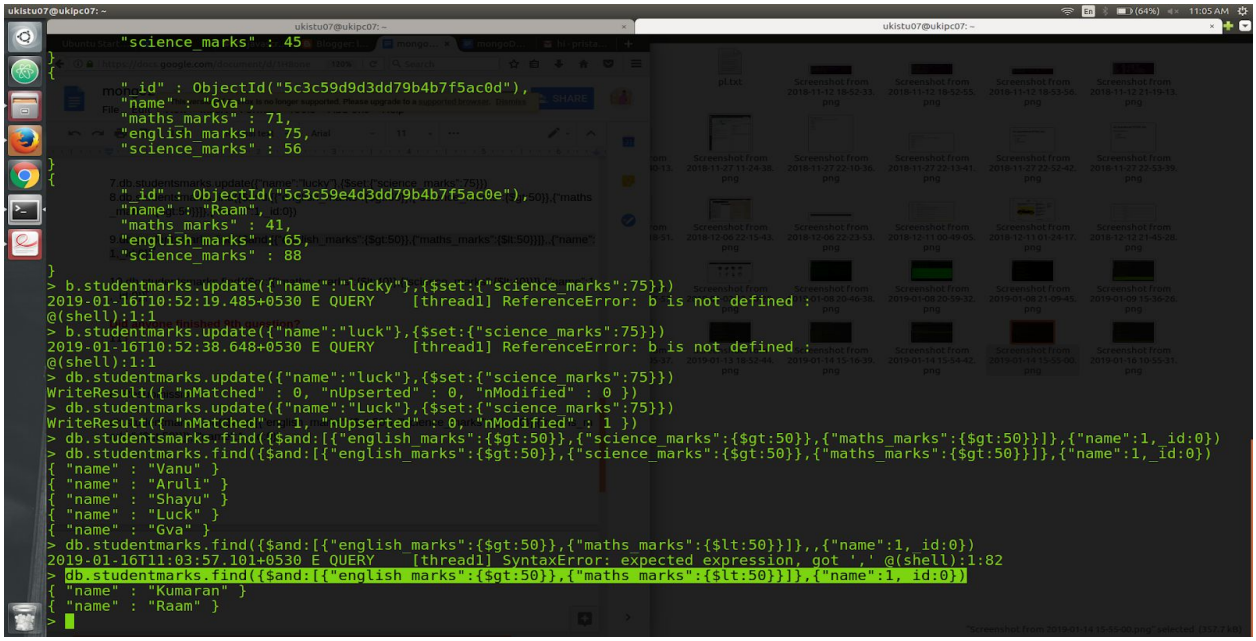
>

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



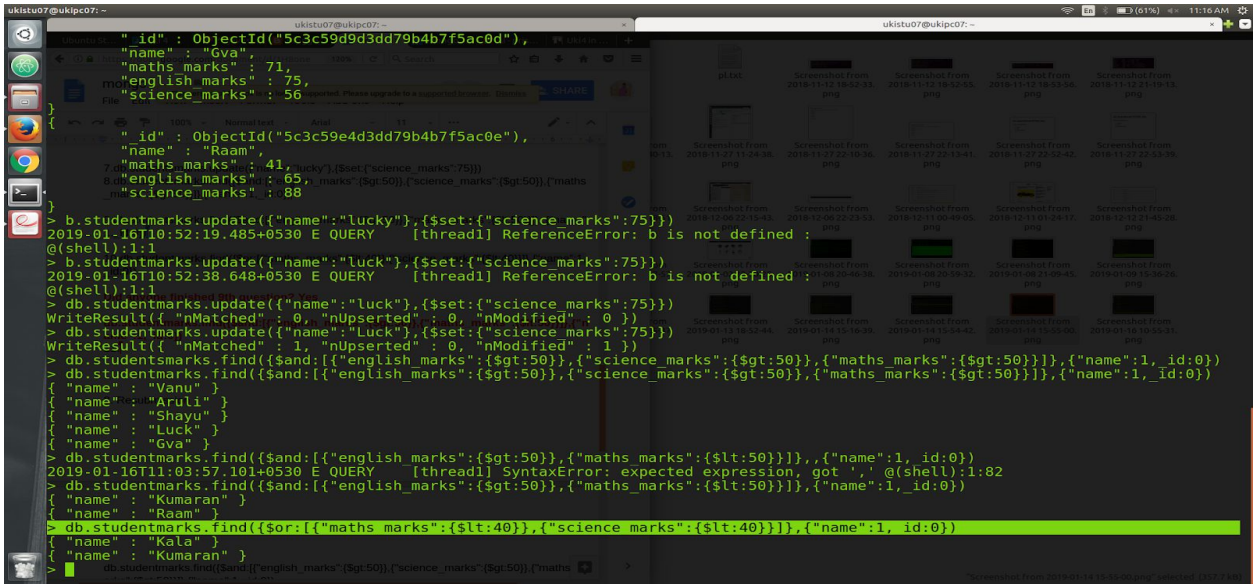
9) List the names who got less than 50 marks in Maths subject and more than 50 marks in English

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



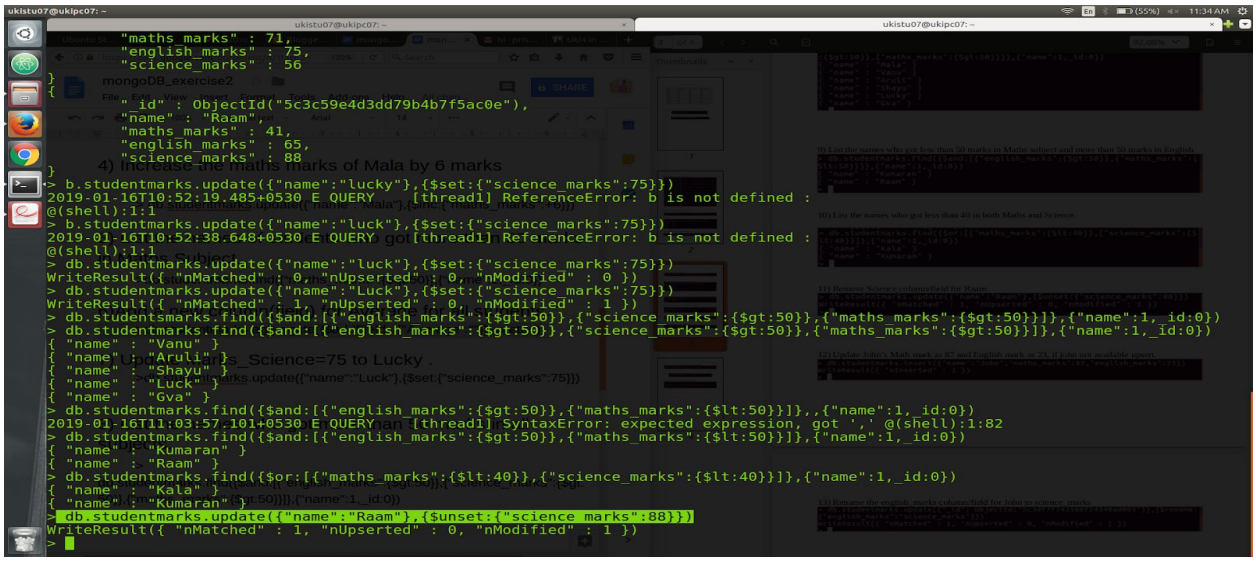
10) List the names who got less than 40 in both Maths and Science.

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



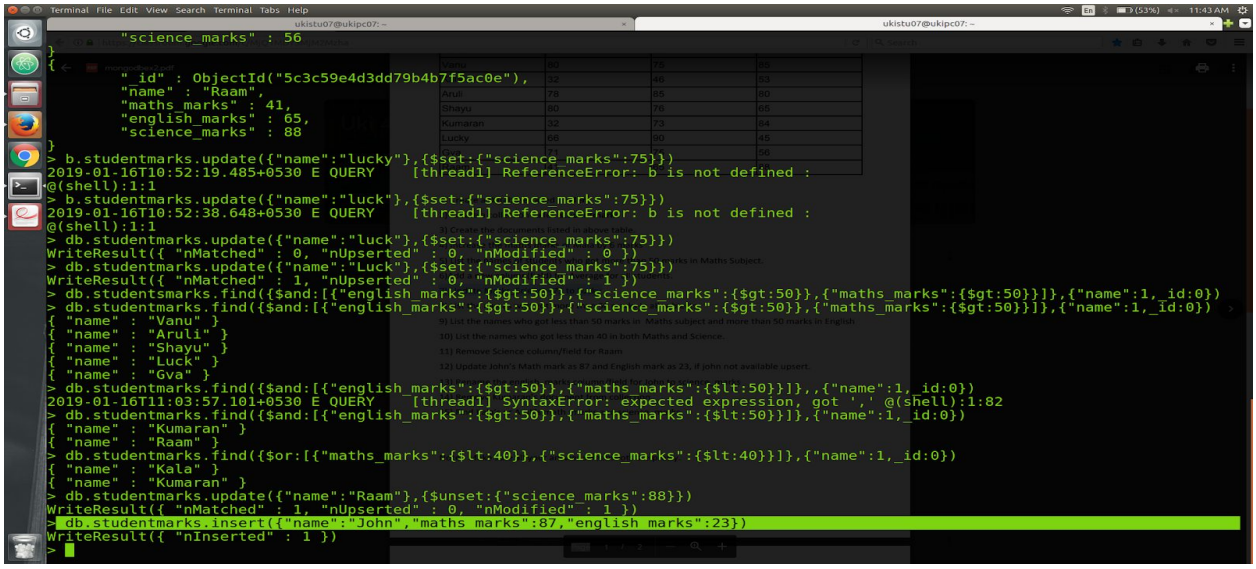
11) Remove Science column/field for Raam

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



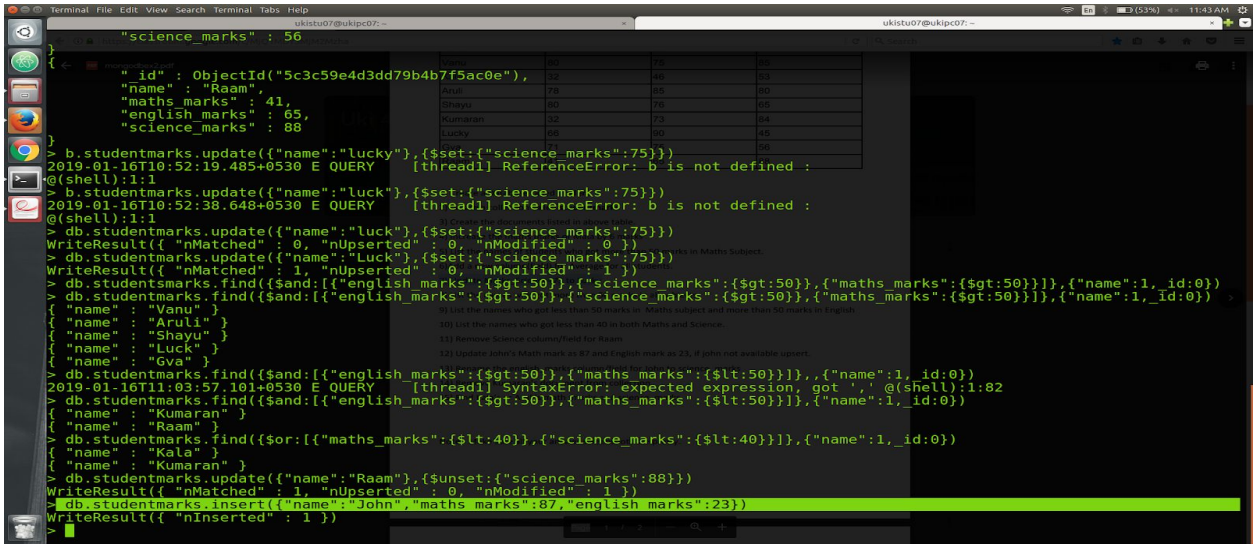
12) Update John’s Math mark as 87 and English mark as 23, if john not available upsert.

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



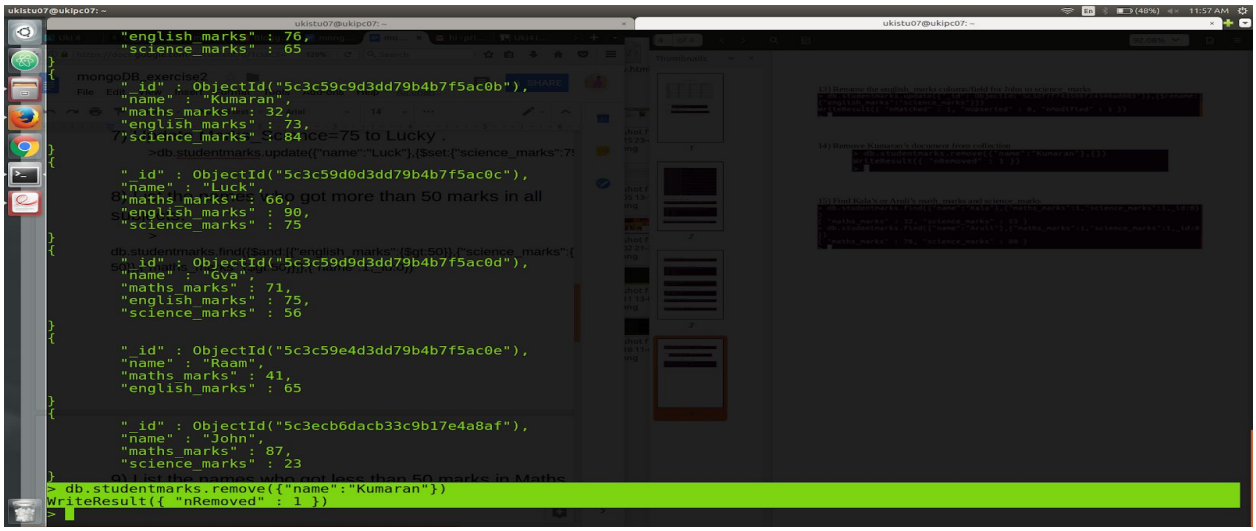
13) Rename the english_marks column/field for John to science_marks

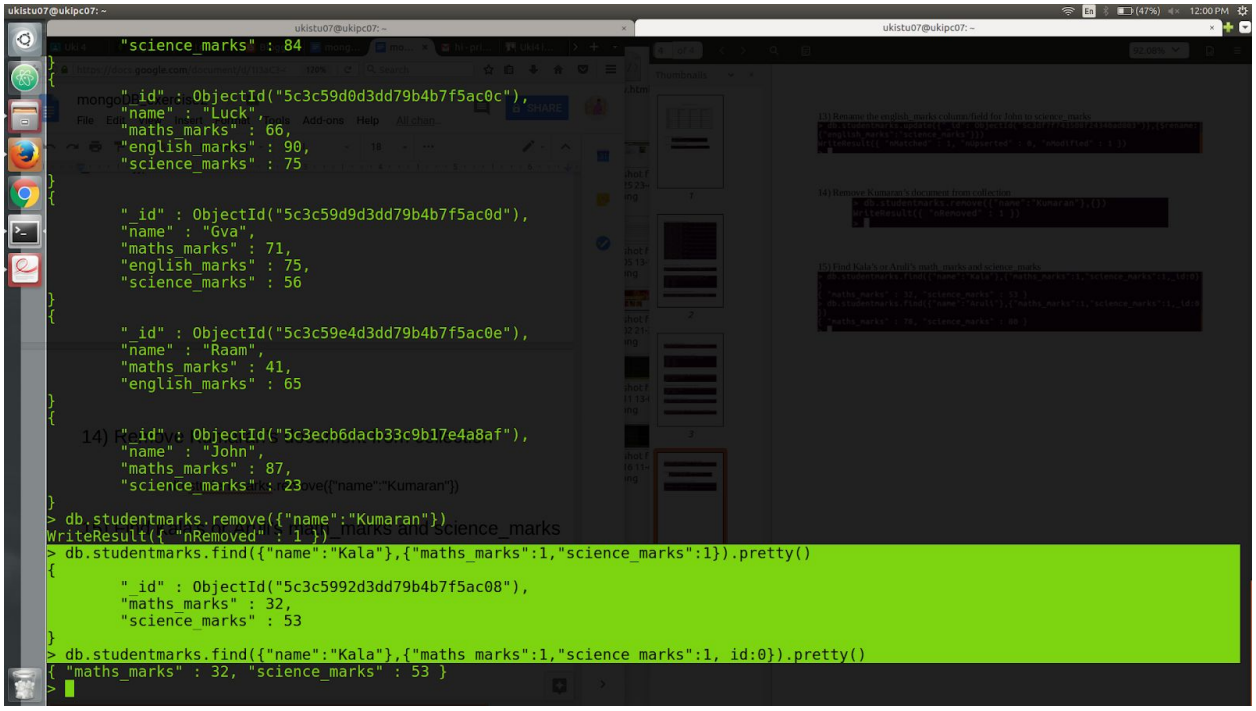
>
db.studentmarks.update({"name":"John"},{$rename:{"english_marks":"science_marks"}})



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({"name":"Kala"},{"maths_marks":1,"science_marks":1}).pretty()