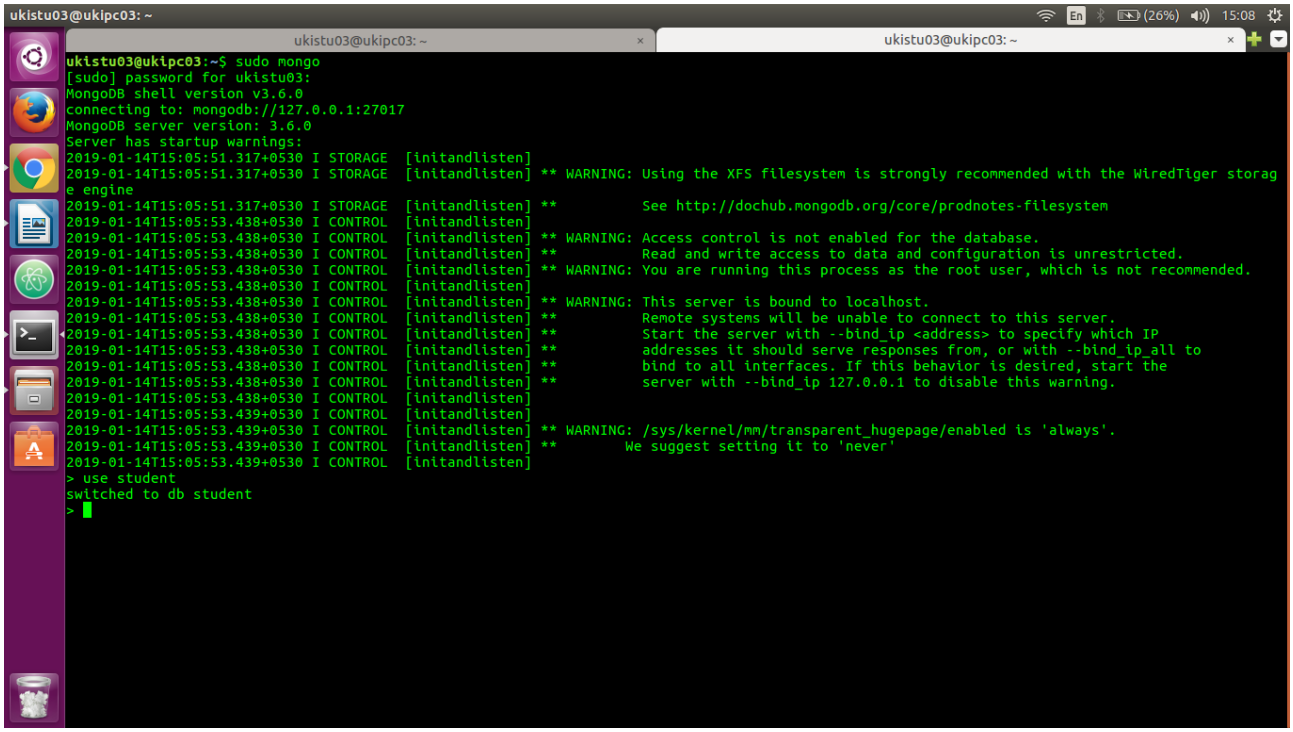
1) Create a Database called student

> use student

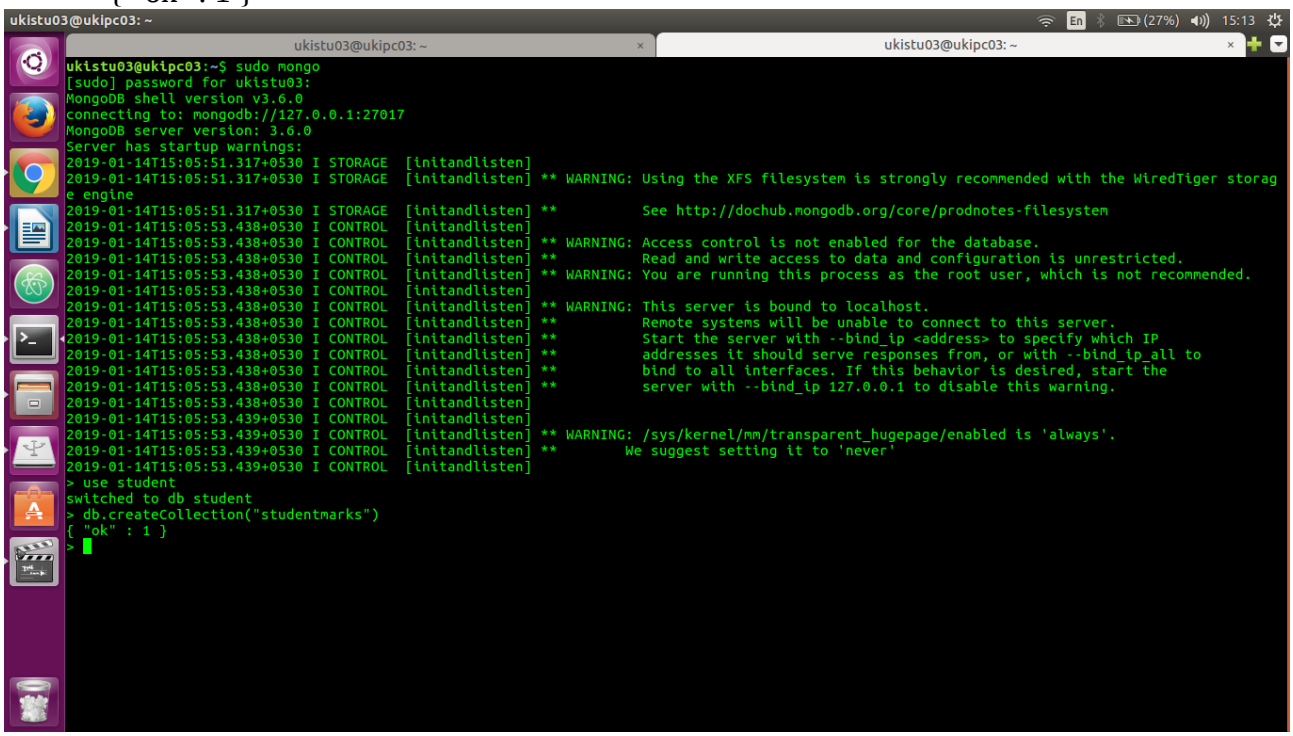
switched to db student




2) Create a collection called studentmarks

> db.createCollection("studentmarks")

{ "ok" : 1 }

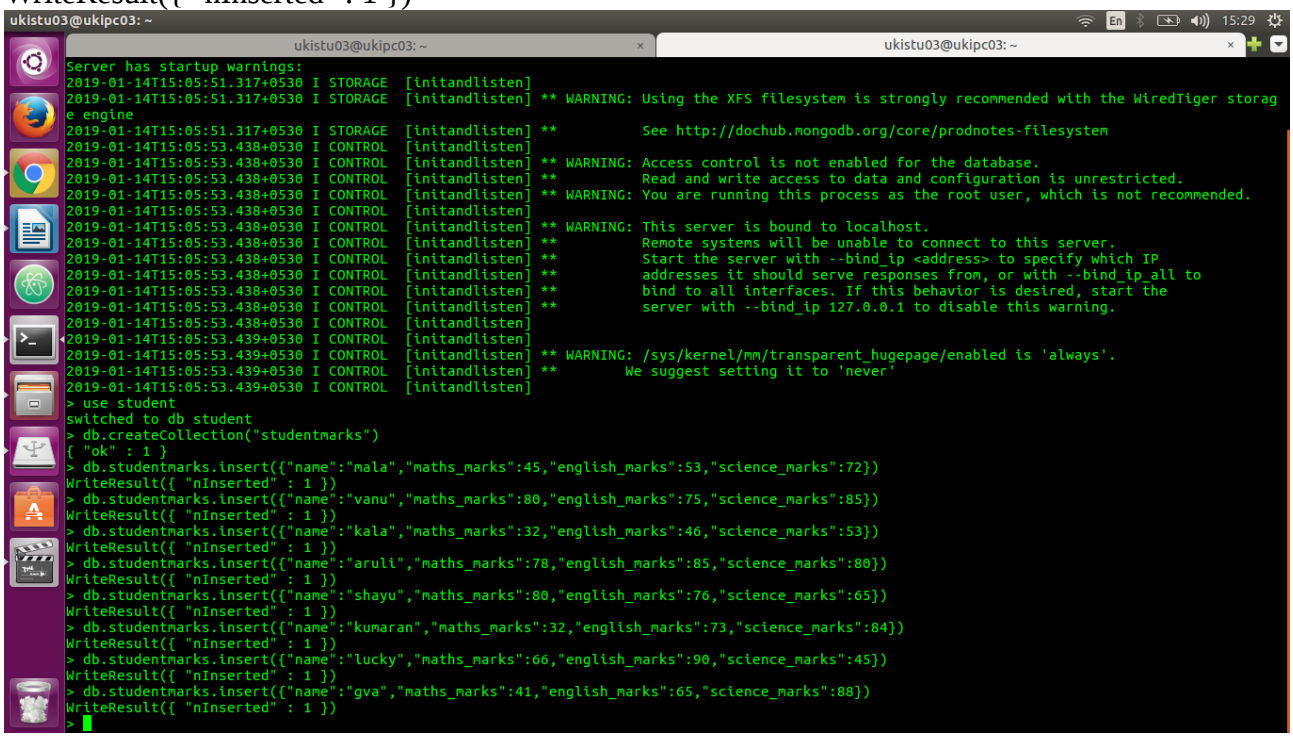



3) Create the documents listed in above table.

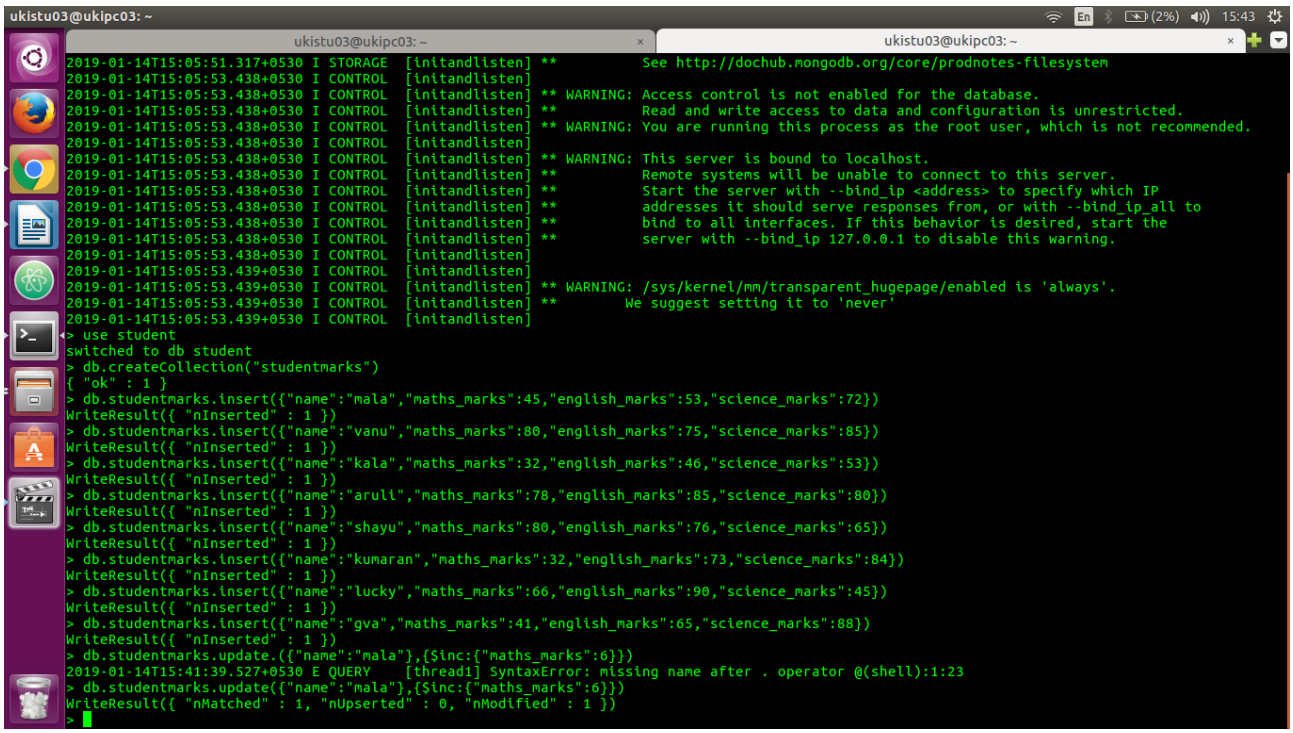
>db.studentmarks.insert({"name":"mala","maths_marks":45,"english_marks":53,"science_marks":72})

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":80,"english_marks":76,"science_marks":6
5})
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":4
5})
WriteResult({ "nInserted" : 1 })
>
db.studentmarks.insert({"name":"gva","maths_marks":41,"english_marks":65,"science_marks":88}
)
WriteResult({ "nInserted" : 1 })

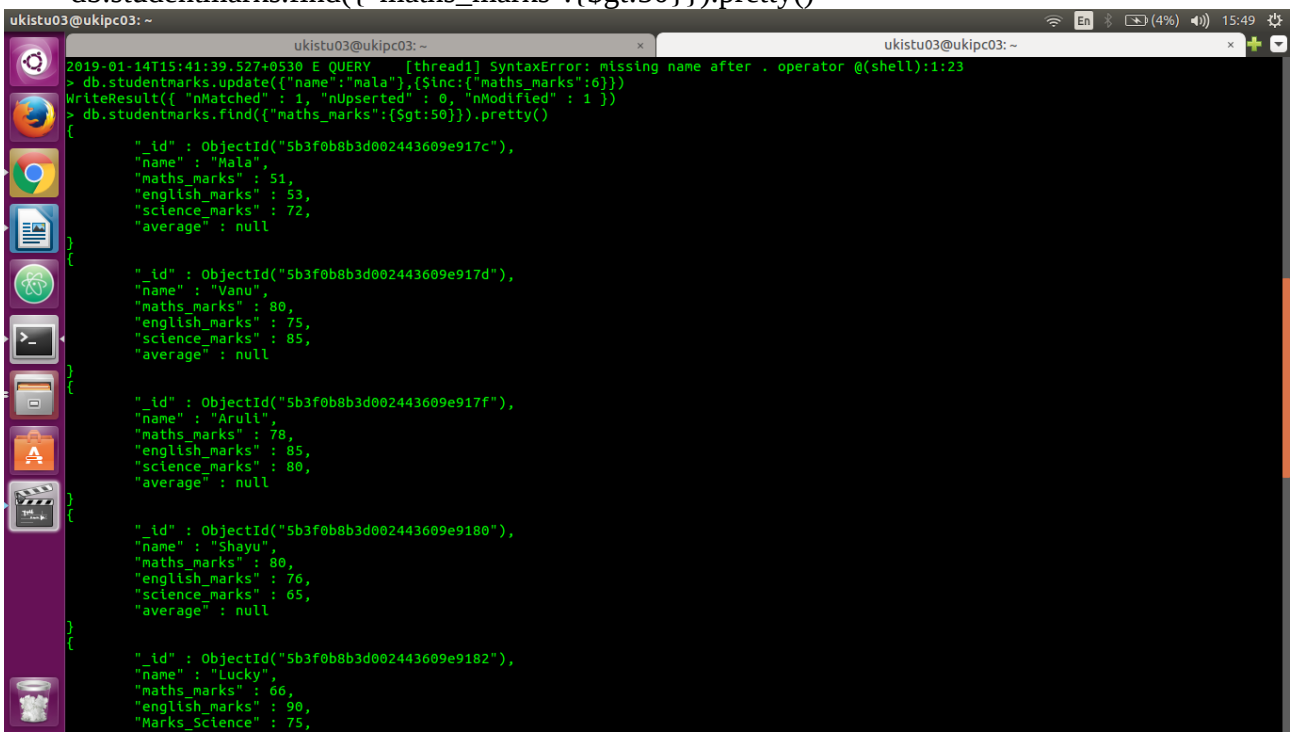



4) Increase the maths marks of Mala by 6 marks
> db.studentmarks.update({"name":"mala"},{$inc:{"maths_marks":6}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })



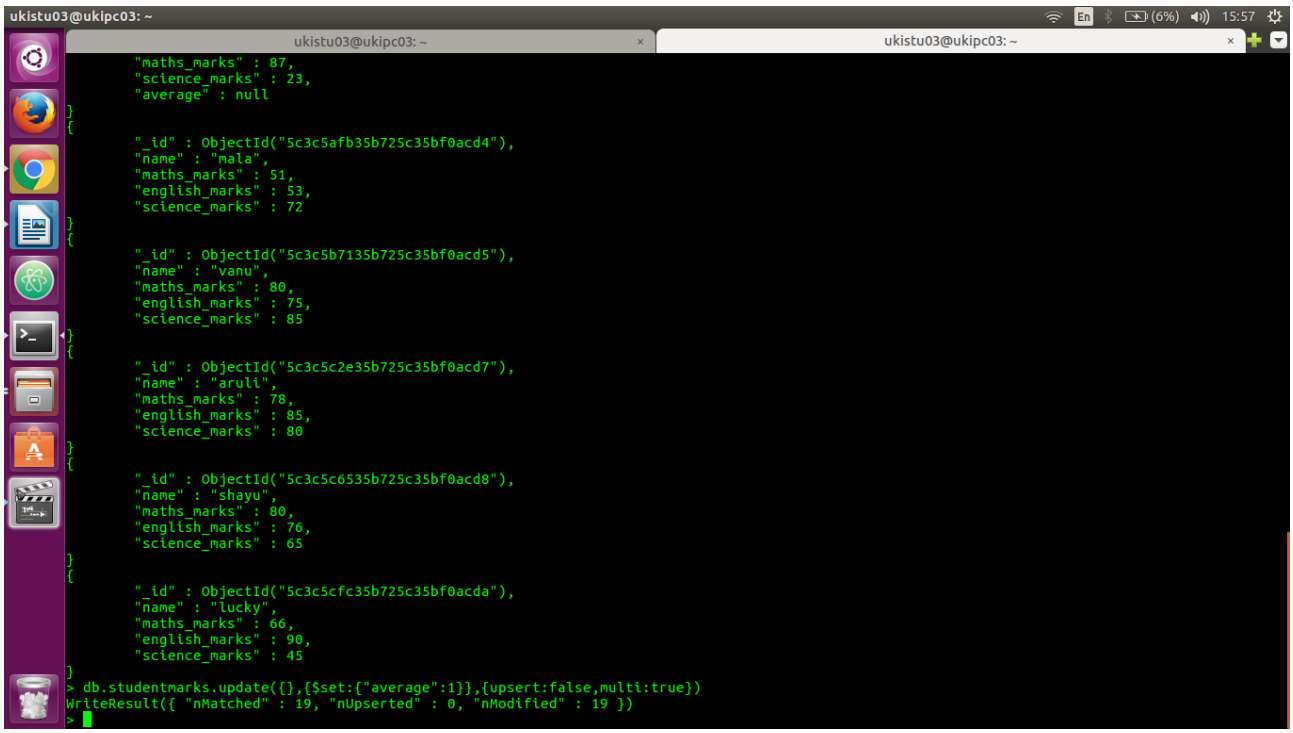

5) List the names of students who got more than 50 marks in Maths Subject.

> db.studentmarks.find({"maths_marks":{$gt:50}}).pretty()

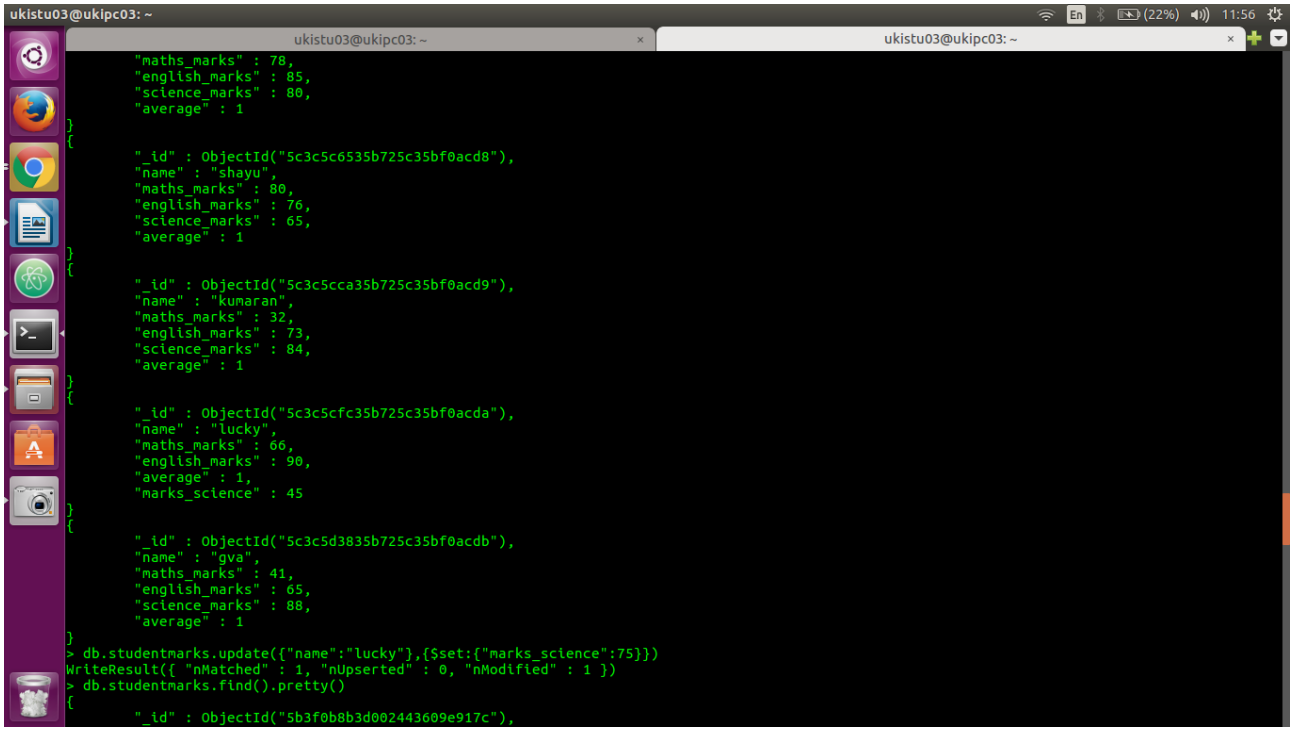



6)Add a new column(field) for Average for all students.

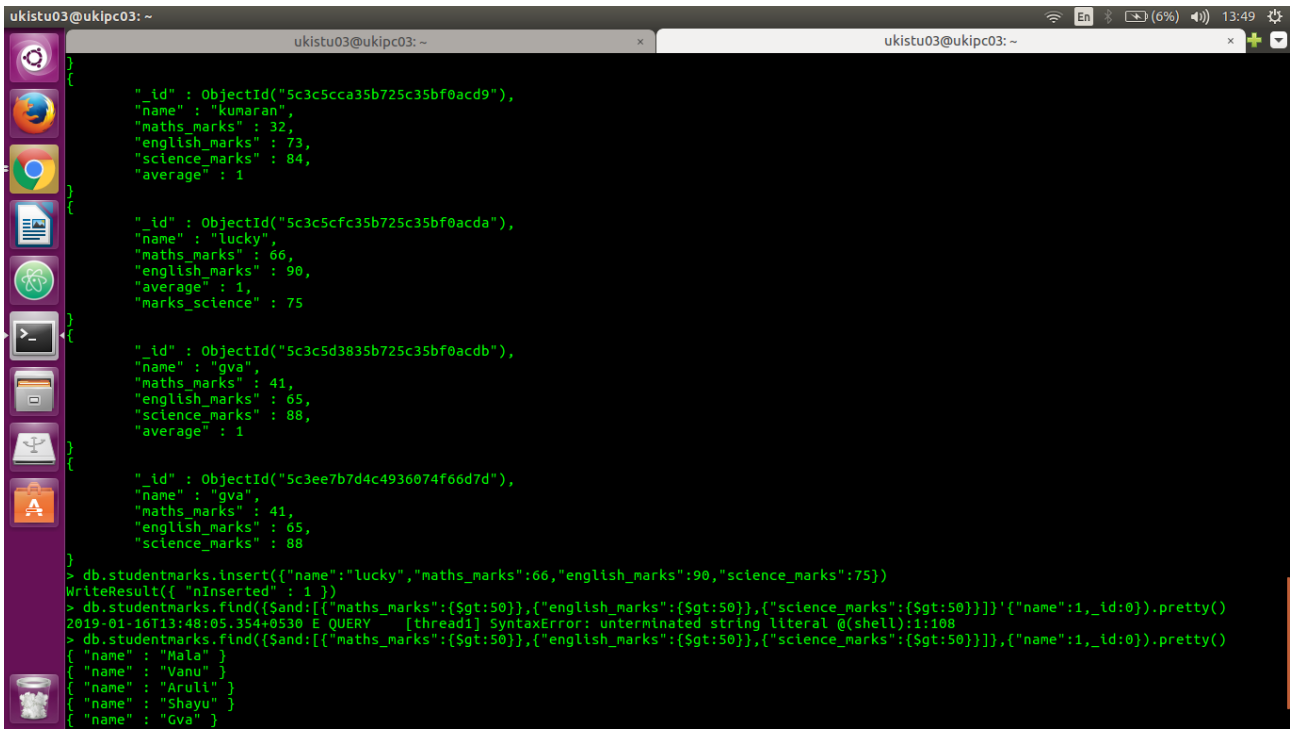
> db.studentmarks.update({},{$set:{"average":1}},{upsert:false,multi:true})




7) Update Marks_Science=75 to Lucky .
> db.studentmarks.update({"name":"lucky"},{$set:{"marks_science":75}})

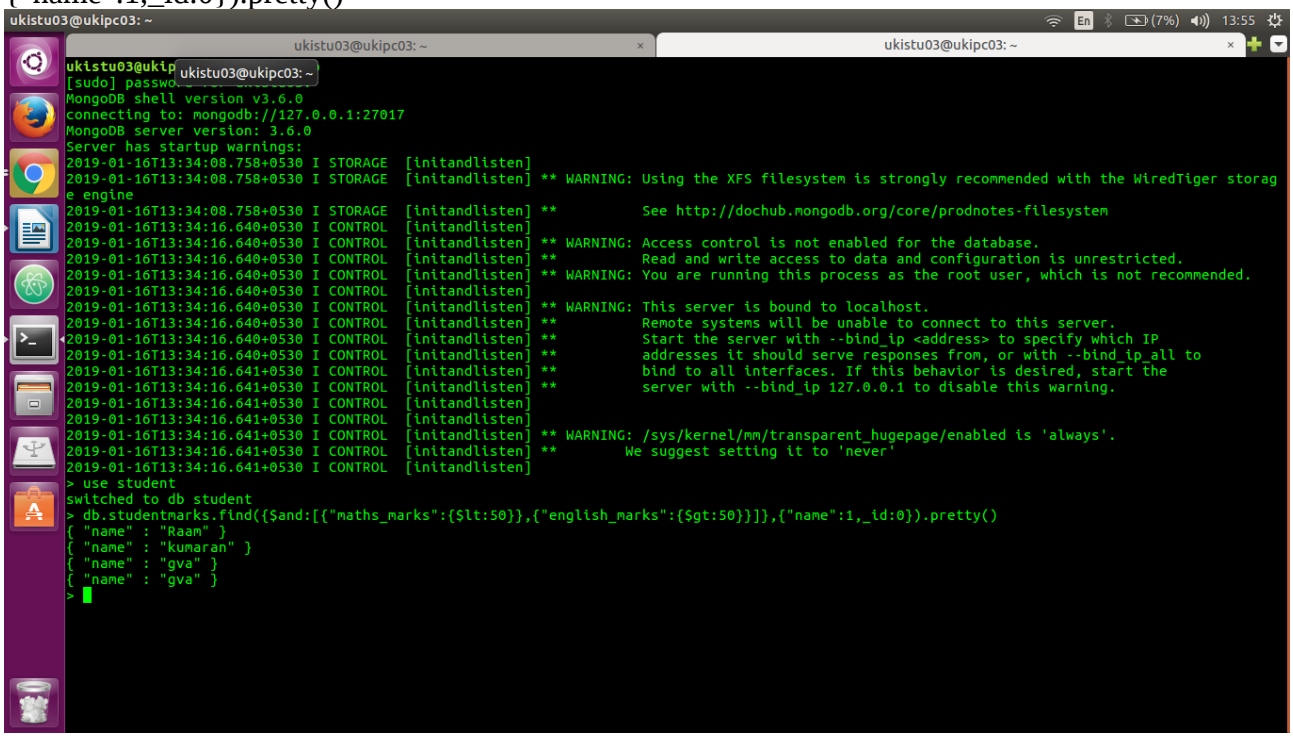



8) List the names who got more than 50 marks in all subjects.
>db.studentmarks.find({$and:[{"maths_marks":{$gt:50}},{"english_marks":{$gt:50}},
{"science_marks":{$gt:50}}]},{"name":1,_id:0}).pretty()



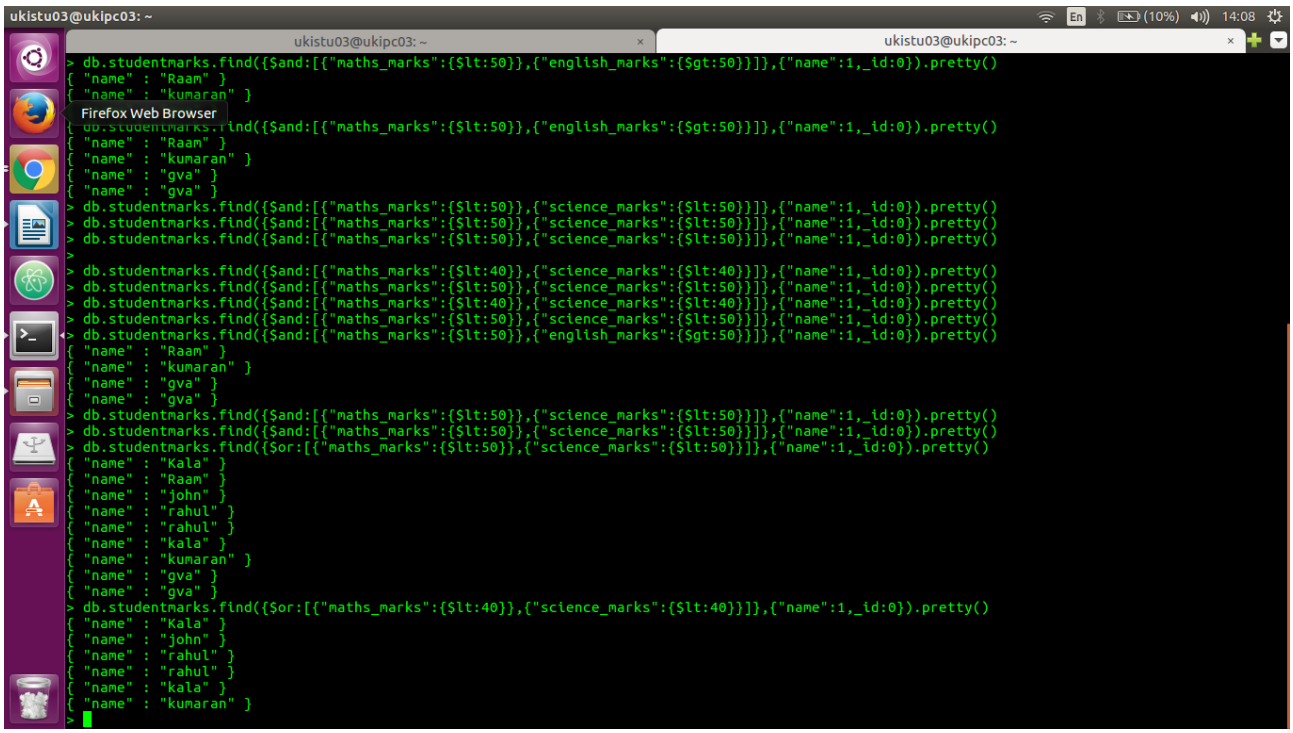

9) List the names who got less than 50 marks in Maths subject and more than 50 marks in English

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



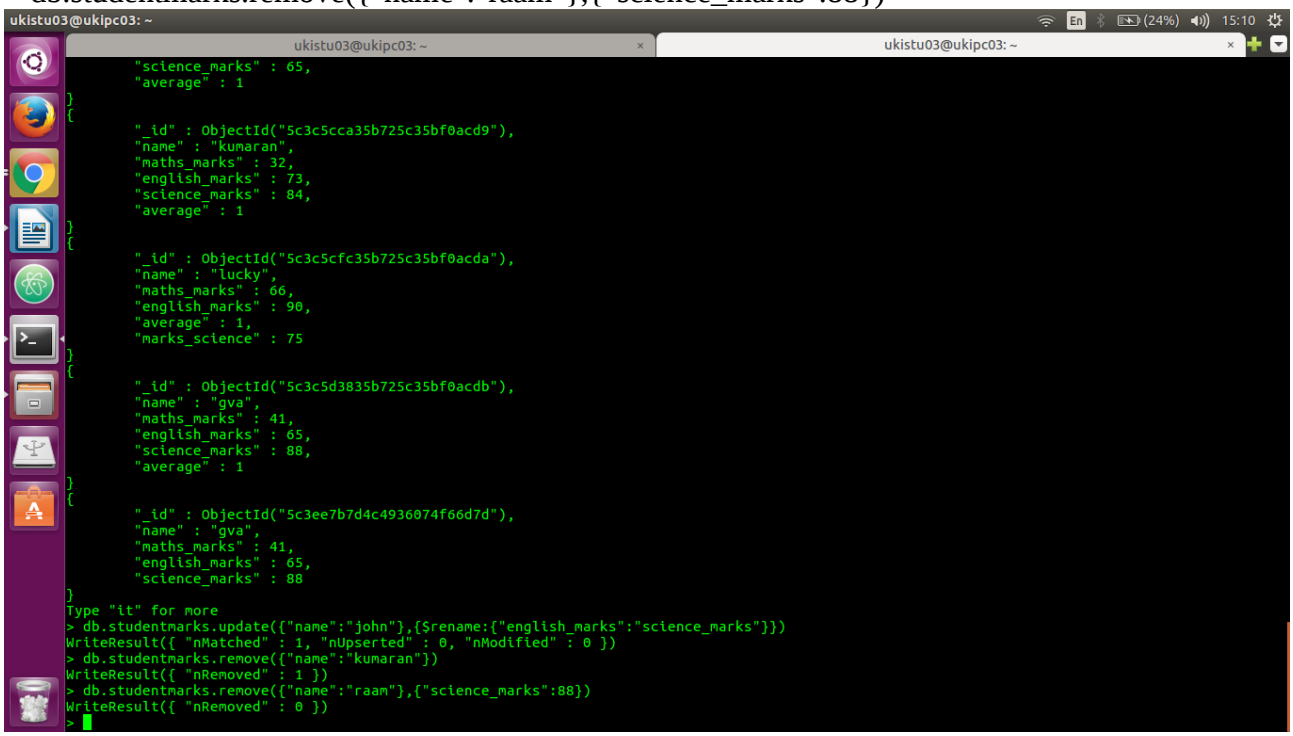

10) List the names who got less than 40 in both Maths and Science.

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



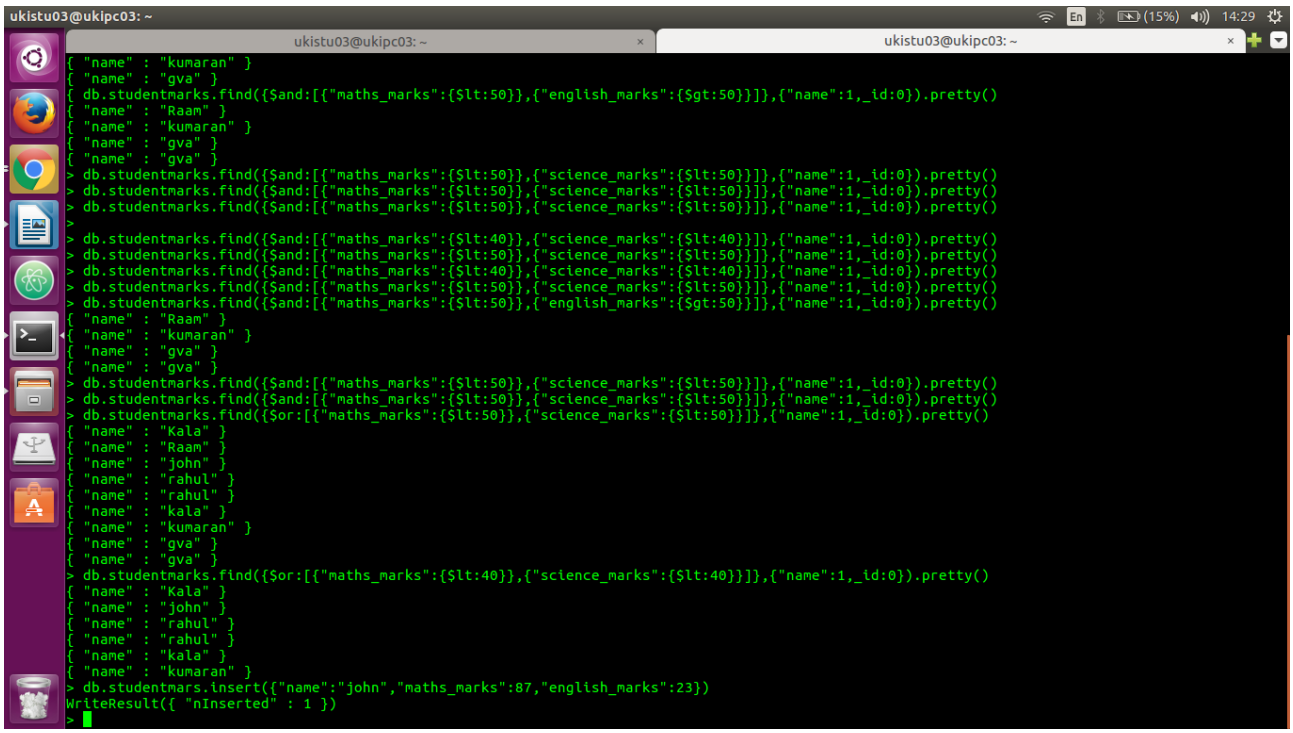

11) Remove Science column/field for Raam

> db.studentmarks.remove({"name":"raam"},{"science_marks":88})



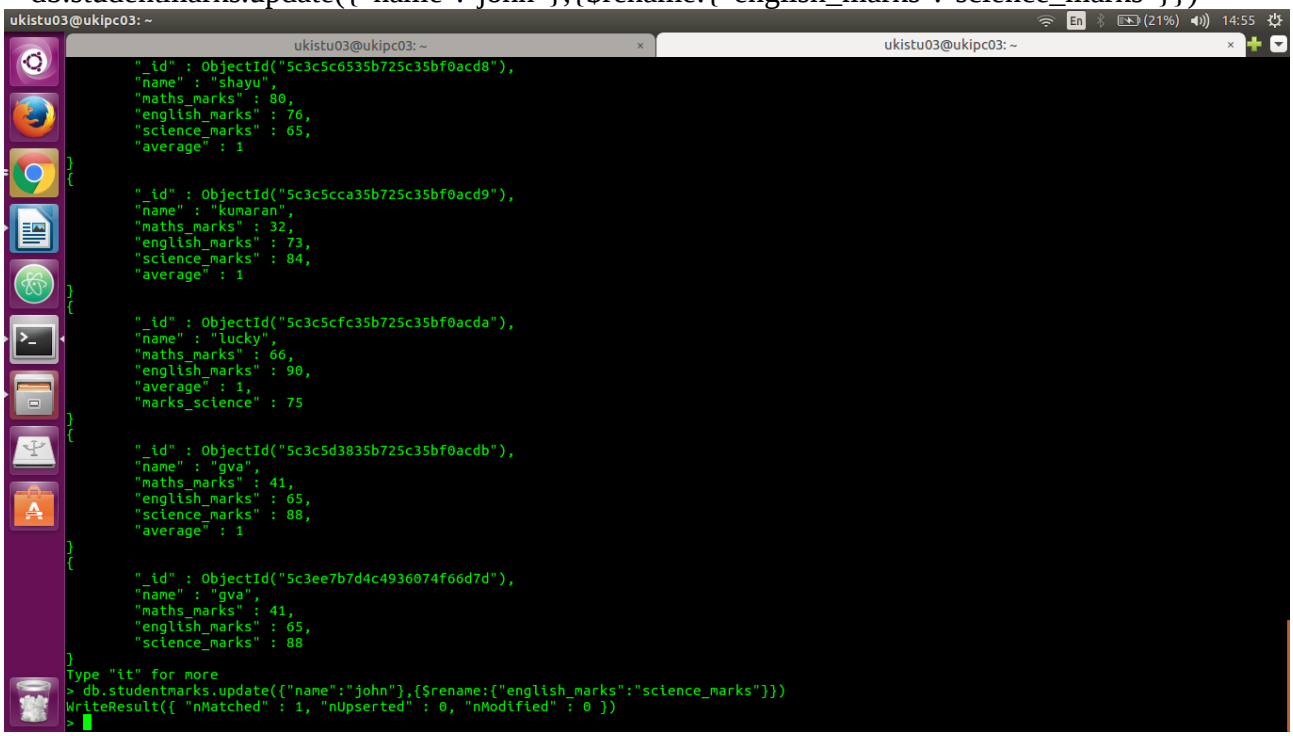

12) Update John’s Math mark as 87 and English mark as 23, if john not available upsert.

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



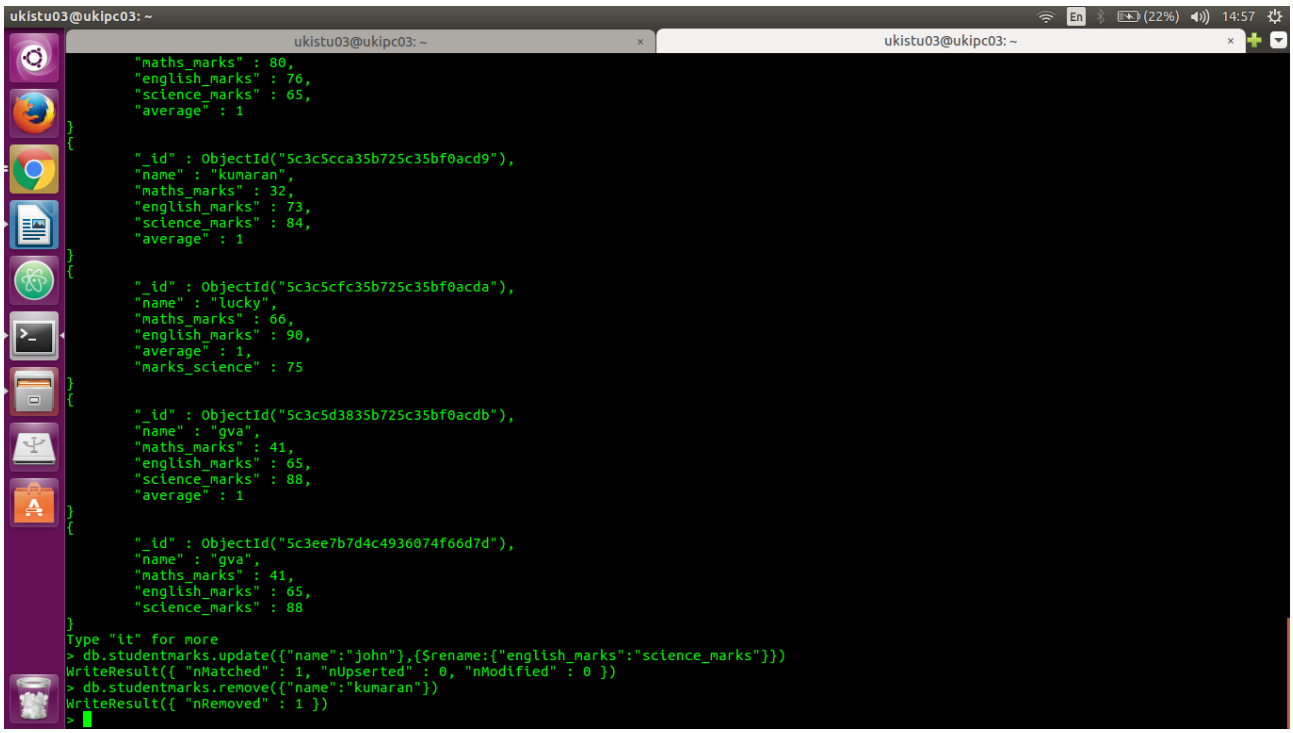

13) Rename the english_marks column/field for John to science_marks

```
> 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":"shayu"},{"name":"mala"}]},{"maths_marks":1})