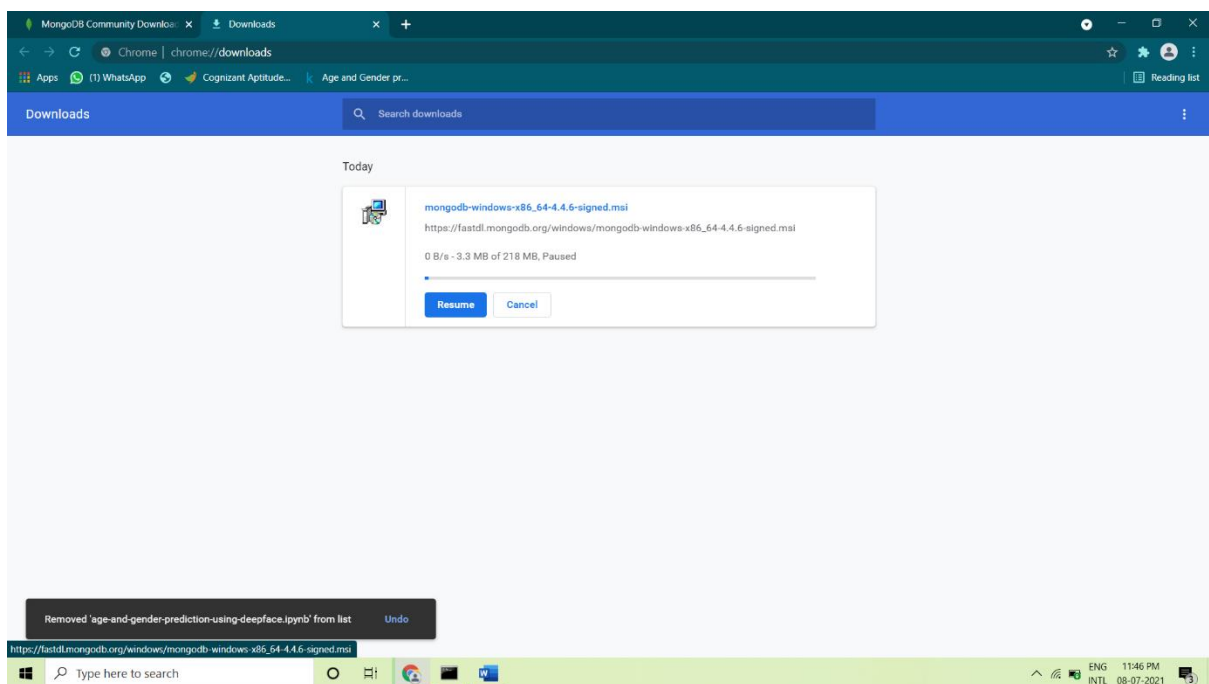
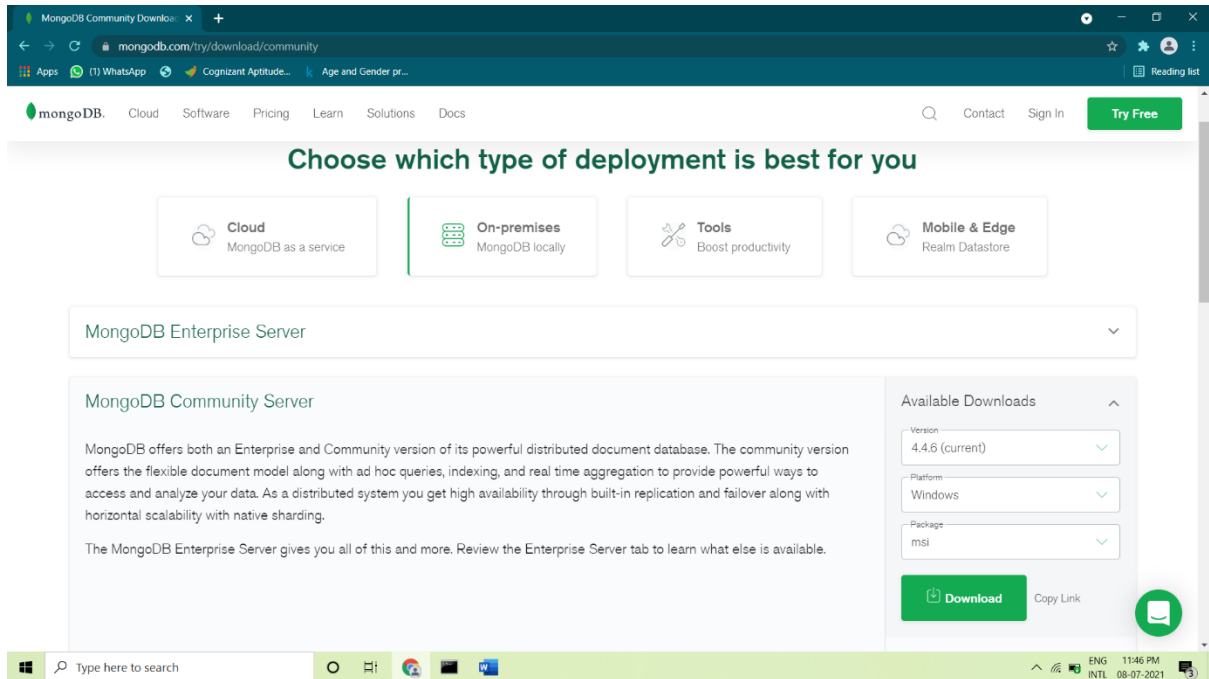
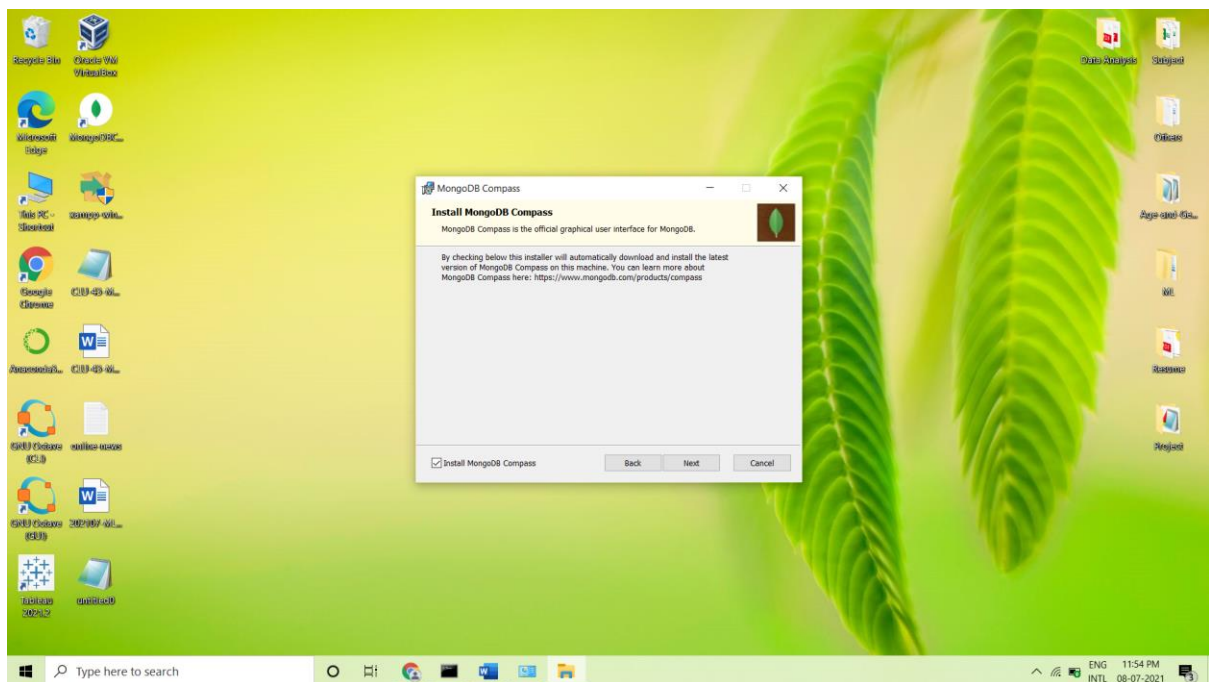
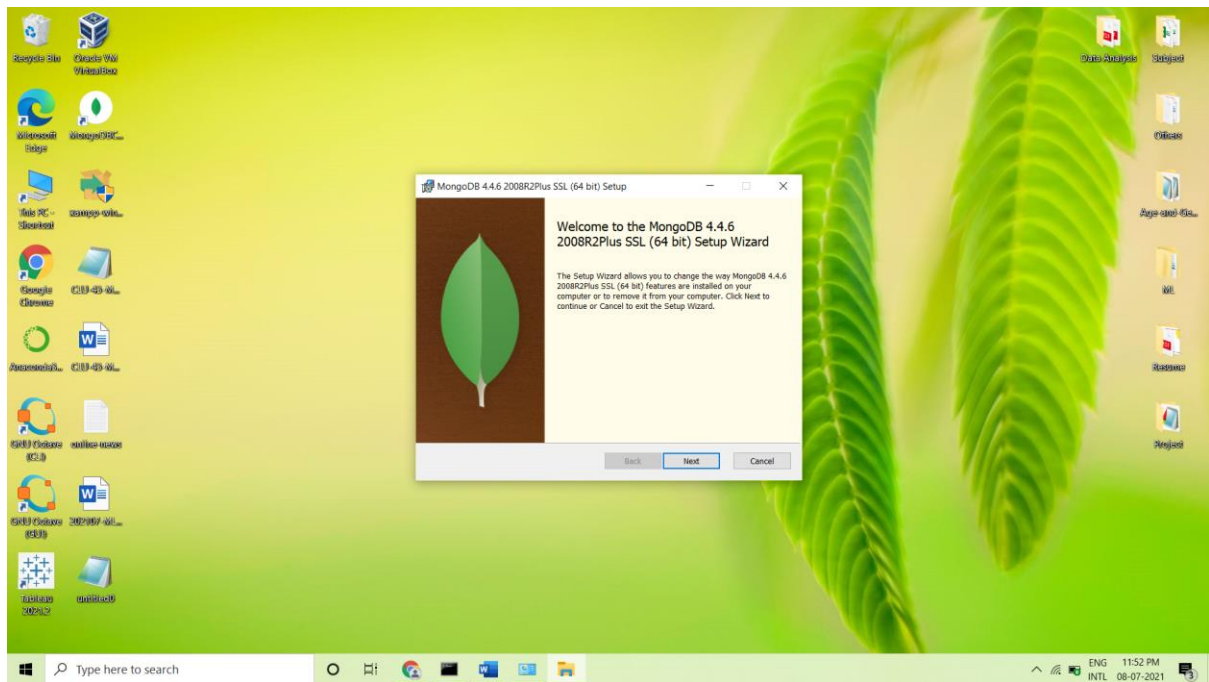
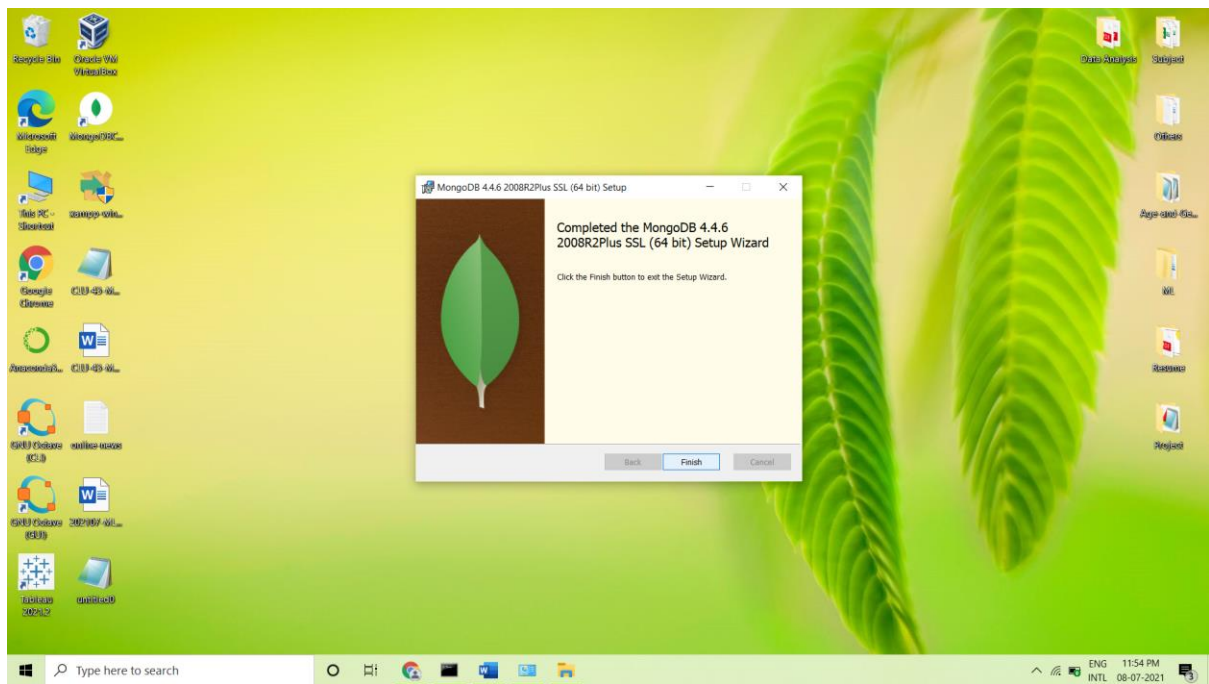
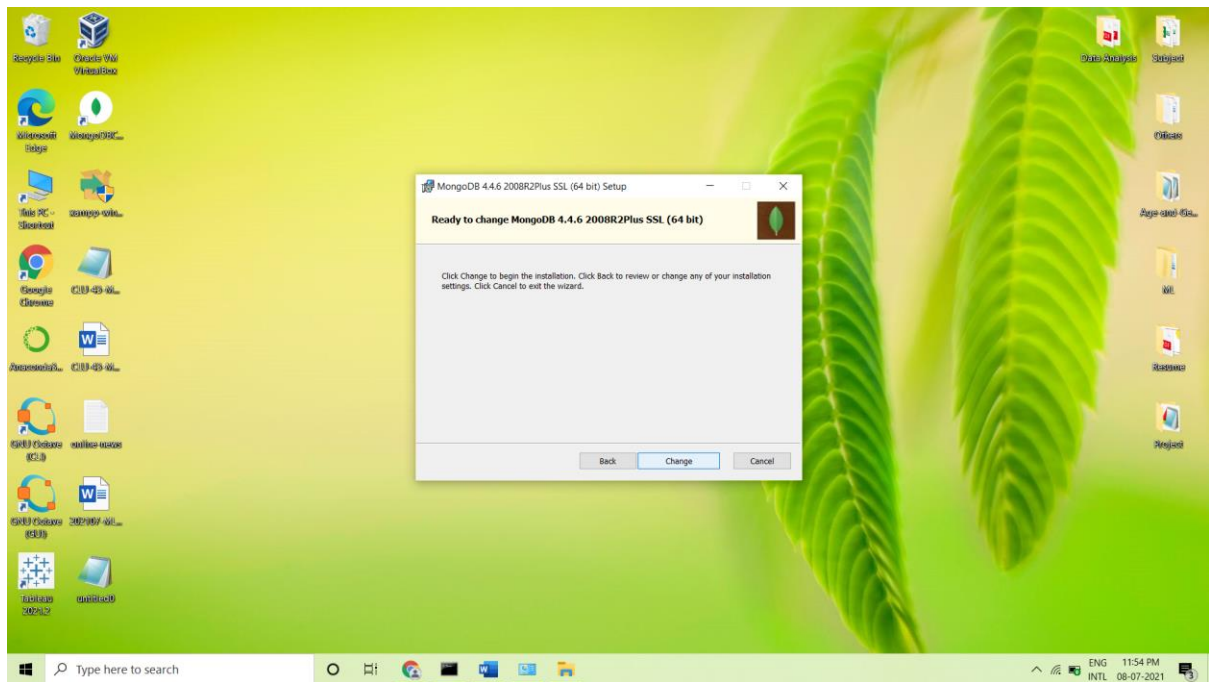


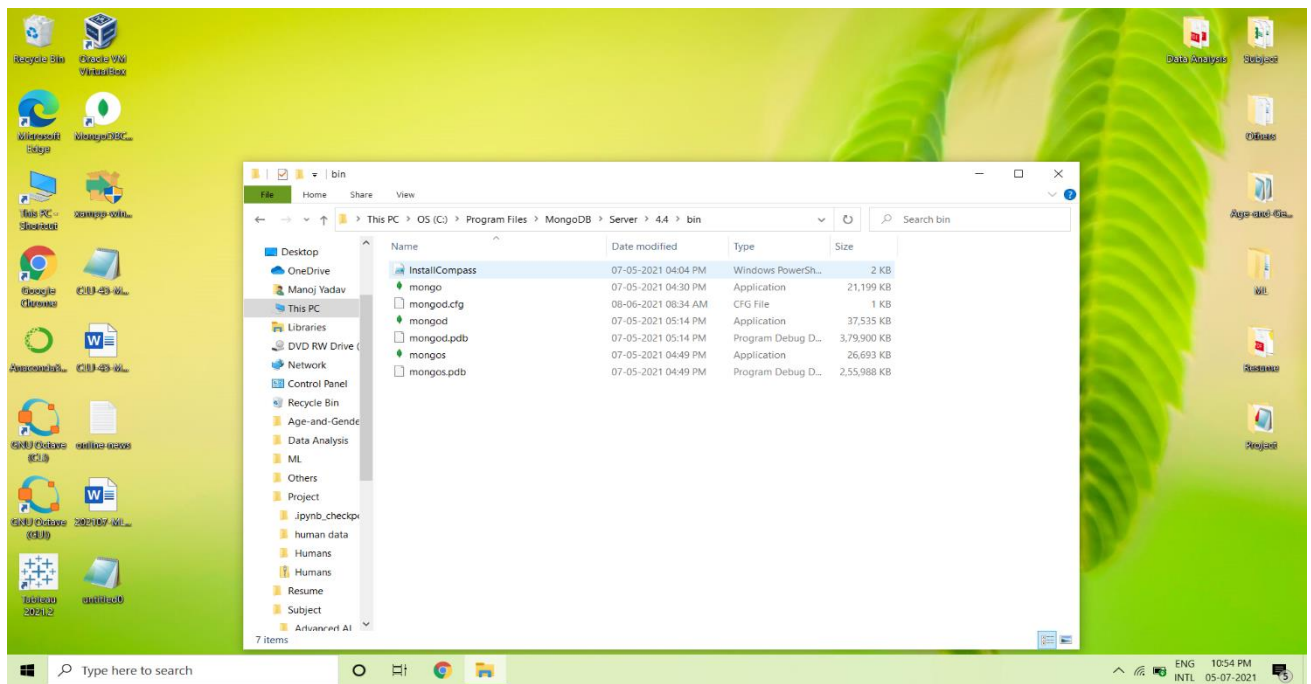
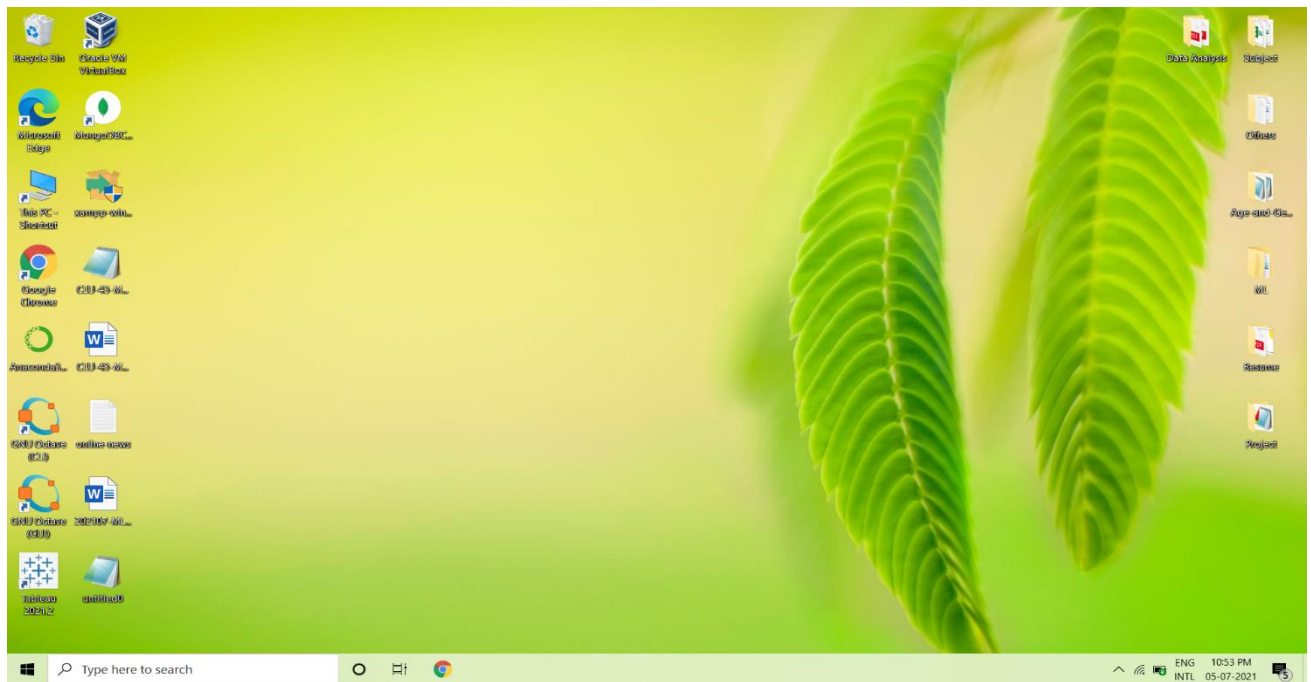
## Experiment : 05

### Installing MongoDB & performing CRUD operation for unstructured data

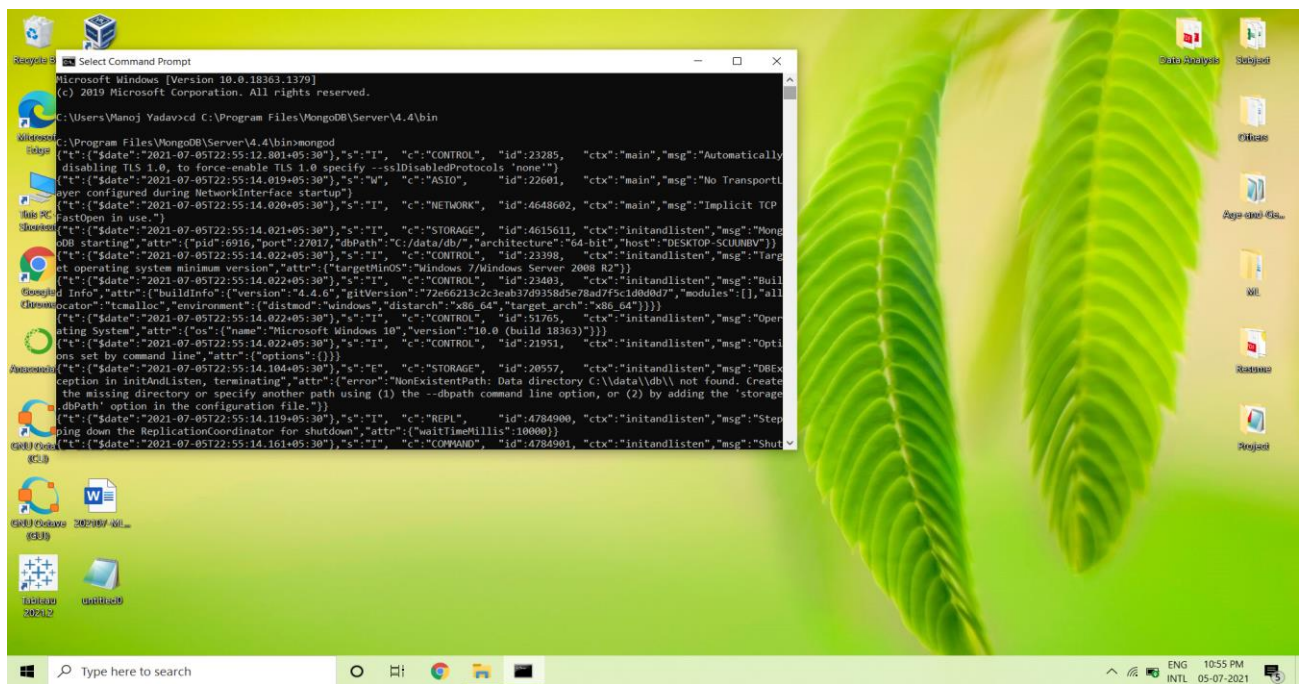
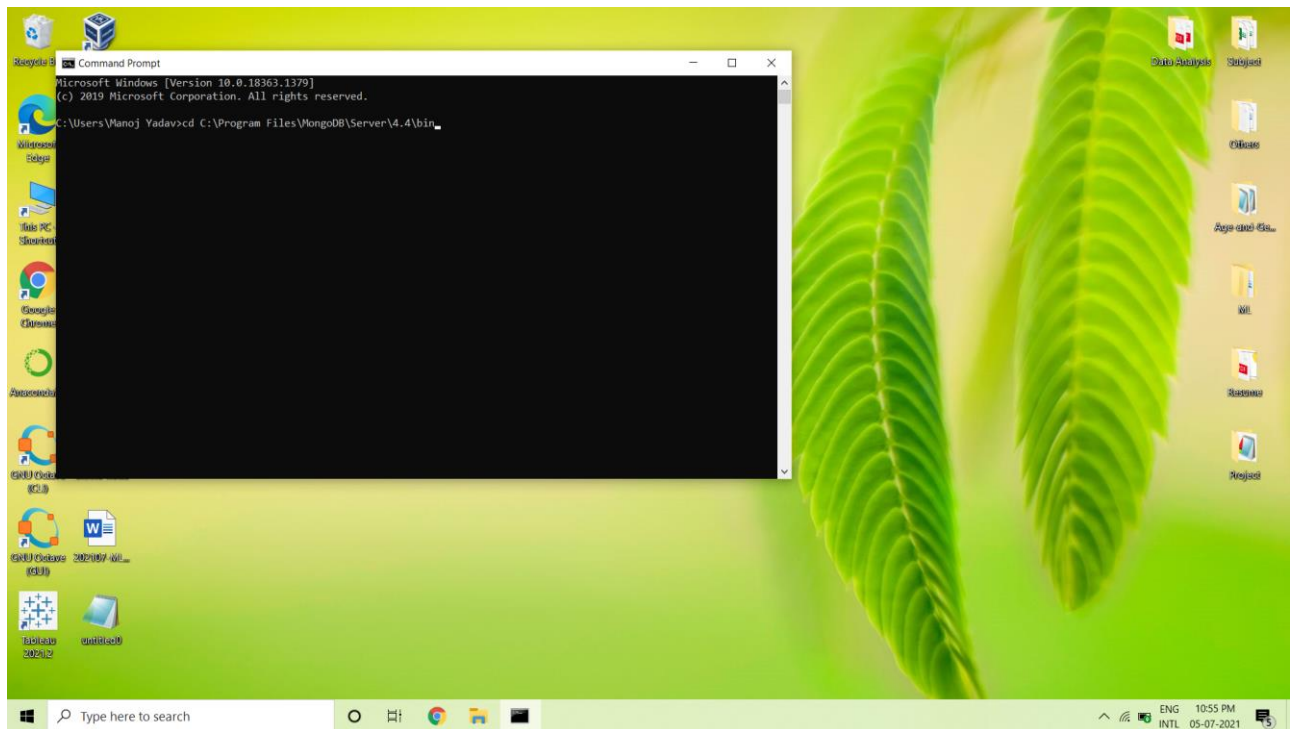


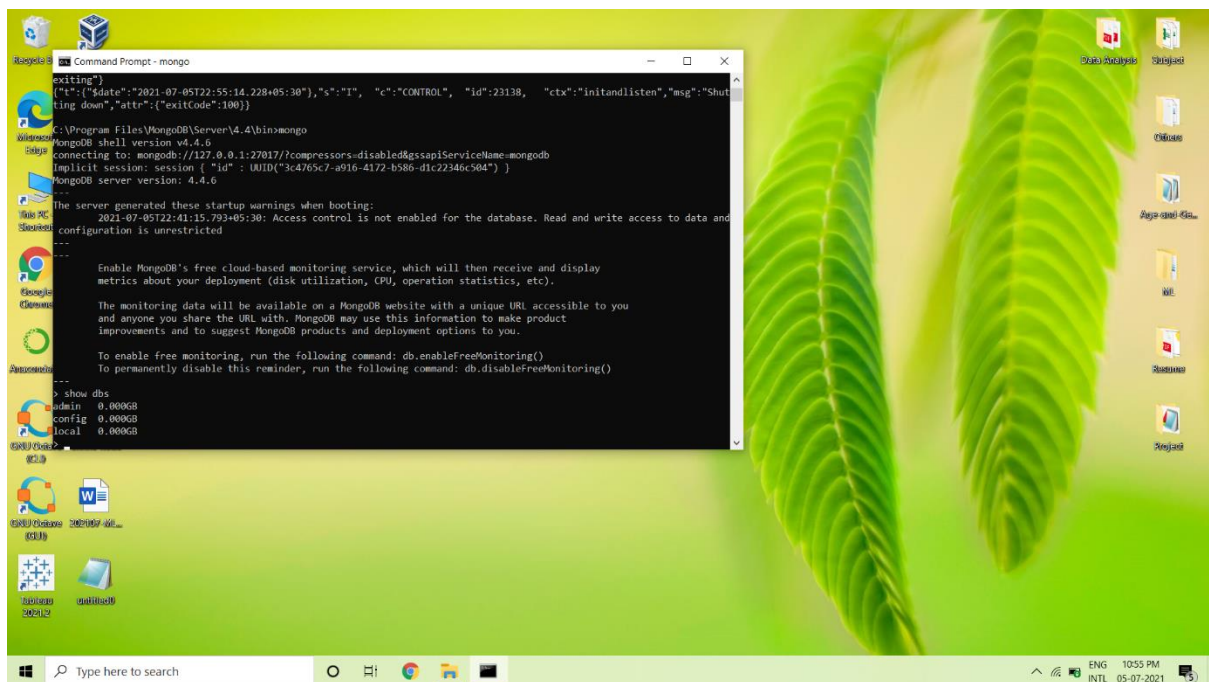
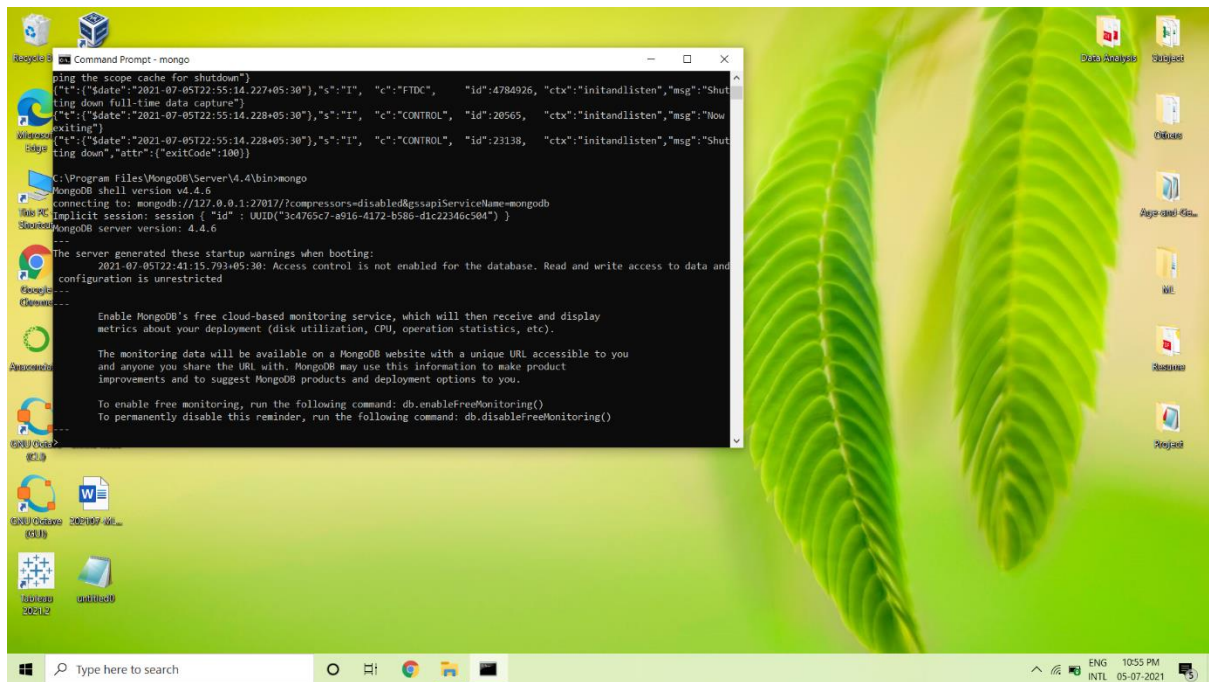


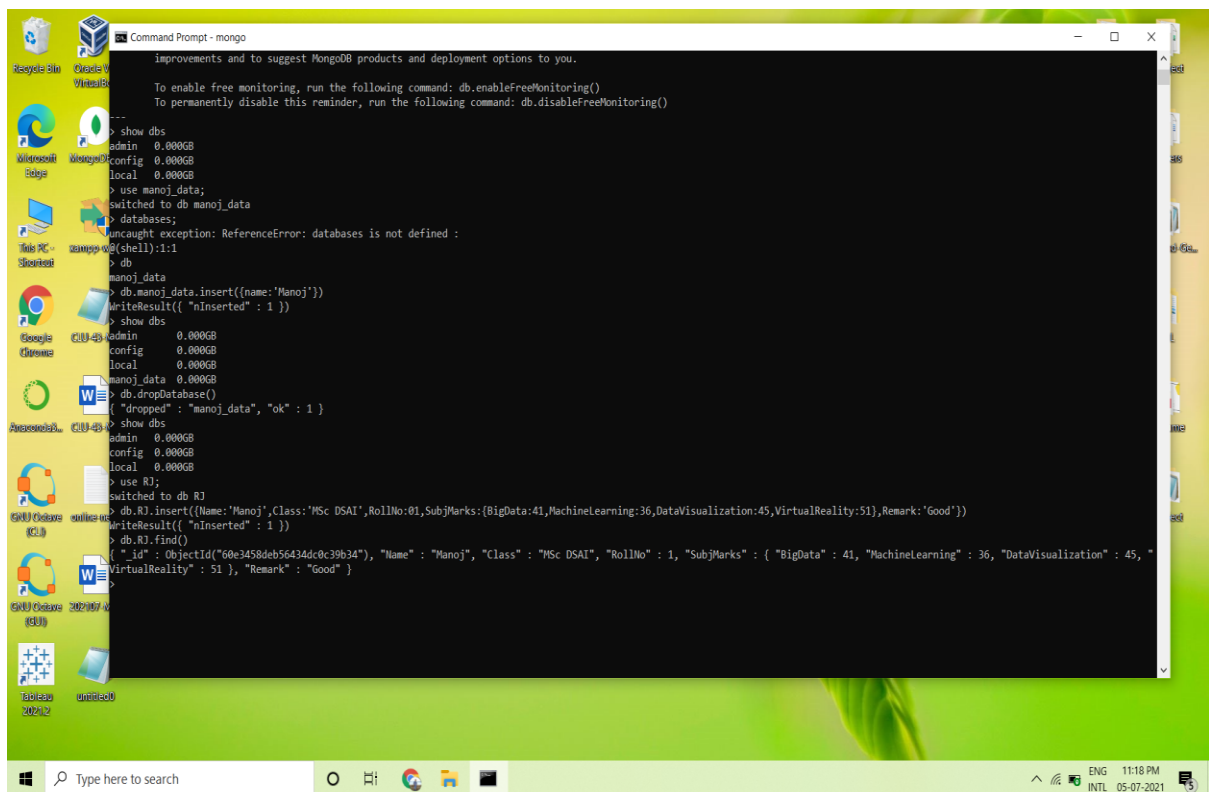
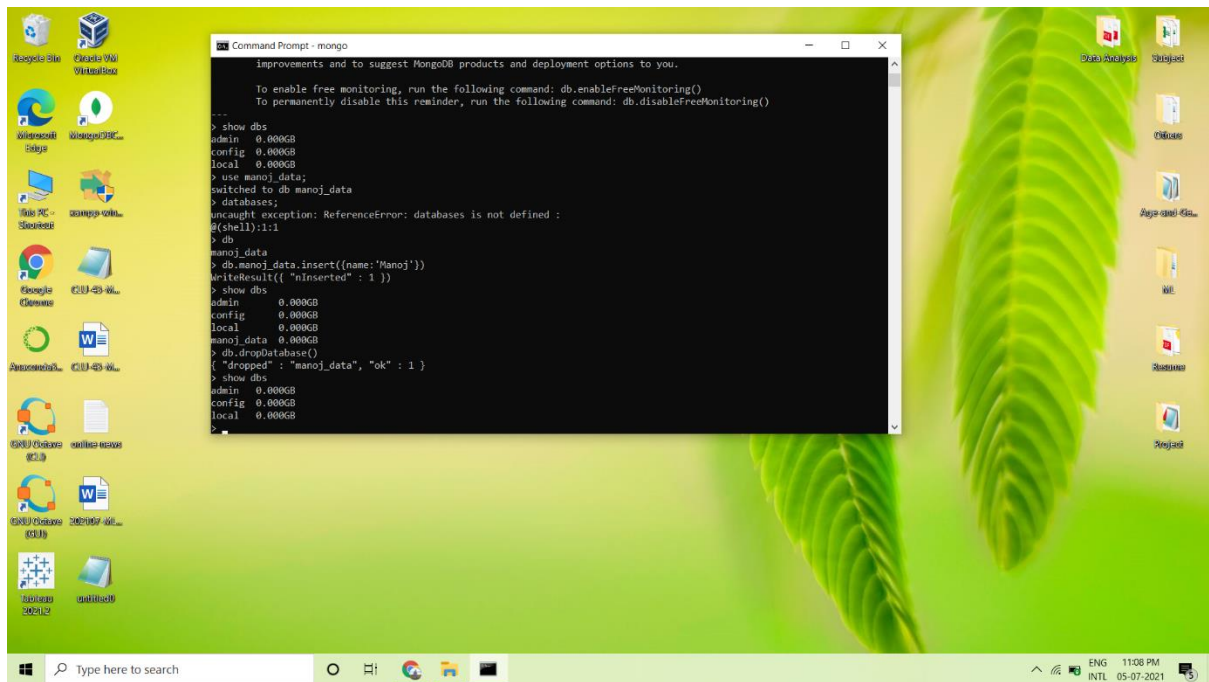














```
Command Prompt - mongo
Implicit session: session { "id" : UUID("5dc9367f-b578-4d2c-86fb-ae8b1627ba0") }
MongoDB server version: 4.4.6

The server generated these startup warnings when booting:
2021-07-05T22:41:15.793+05:30: Access control is not enabled for the database. Read and write access to data and configuration is unrestricted

---
Enable MongoDB's free cloud-based monitoring service, which will then receive and display
metrics about your deployment (disk utilization, CPU, operation statistics, etc).

The monitoring data will be available on a MongoDB website with a unique URL accessible to you
and anyone you share the URL with. MongoDB may use this information to make product
improvements and to suggest MongoDB products and deployment options to you.

To enable free monitoring, run the following command: db.enableFreeMonitoring()
To permanently disable this reminder, run the following command: db.disableFreeMonitoring()

---
> show dbs
RJ      0.000GB
admin   0.000GB
config  0.000GB
local   0.000GB
> use RJ
switched to db RJ
> db.RJ.find()
{ "_id" : ObjectId("60e34764eb56434dc0c39b36"), "Name" : "Ritvik", "Class" : "MSc DSAI", "RollNo" : 2, "SubjMarks" : { "BigData" : 51, "MachineLearning" : 56, "DataVisualization" : 65, "VirtualReality" : 61 }, "Remark" : "VeryGood" }
...
> db.RJ.insert({Name:'Manoj',class:'MSc DSAI',RollNo:4,SubjMarks:{BigData:45,MachineLearning:41,DataVisualization:39,VirtualReality:40},Remark:'Good'})
WriteResult({ "nInserted" : 1 })
> db.RJ.insert({Name:'Akash',class:'MSc DSAI',RollNo:5,SubjMarks:{BigData:45,MachineLearning:41,DataVisualization:39,VirtualReality:40},Remark:'Good'})
WriteResult({ "nInserted" : 1 })
> db.RJ.insert({Name:'Manoj',class:'MSc DSAI',RollNo:4,SubjMarks:{BigData:45,MachineLearning:41,DataVisualization:39,VirtualReality:40},Remark:'Good'})
WriteResult({ "nInserted" : 1 })
> db.RJ.insert({Name:'Manoj',Class:'MSc DSAI',RollNo:04,SubjMarks:{BigData:41,MachineLearning:36,DataVisualization:55,VirtualReality:41},Remark:'Good'})
WriteResult({ "nInserted" : 1 })
> db.RJ.insert({Name:'Akash',Class:'MSc DSAI',RollNo:05,SubjMarks:{BigData:57,MachineLearning:66,DataVisualization:65,VirtualReality:41},Remark:'VeryGood'})
WriteResult({ "nInserted" : 1 })
> db.RJ.insert({Name:'Akash',Class:'MSc DSAI',RollNo:05,SubjMarks:{BigData:67,MachineLearning:70,DataVisualization:75,VirtualReality:70},Remark:'Excellent'})
WriteResult({ "nInserted" : 1 })
> db.RJ.find()
{ "_id" : ObjectId("60e34764eb56434dc0c39b36"), "Name" : "Ritvik", "Class" : "MSc DSAI", "RollNo" : 2, "SubjMarks" : { "BigData" : 51, "MachineLearning" : 56, "DataVisualization" : 65, "VirtualReality" : 61 }, "Remark" : "VeryGood" }
{ "_id" : ObjectId("60e347faeb56434dc0c39b37"), "Name" : "Manish", "Class" : "MSc DSAI", "RollNo" : 3, "SubjMarks" : { "BigData" : 31, "MachineLearning" : 26, "DataVisualization" : 25, "VirtualReality" : 61 }, "Remark" : "VeryGood" }
{ "_id" : ObjectId("60e48fee805c3046d2121912"), "Name" : "Manoj", "Class" : "MSc DSAI", "RollNo" : 4, "SubjMarks" : { "BigData" : 41, "MachineLearning" : 36, "DataVisualization" : 55, "VirtualReality" : 41 }, "Remark" : "Good" }
{ "_id" : ObjectId("60e4901f805c3046d2121913"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 57, "MachineLearning" : 66, "DataVisualization" : 65, "VirtualReality" : 41 }, "Remark" : "VeryGood" }
{ "_id" : ObjectId("60e49045805c3046d2121914"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 67, "MachineLearning" : 70, "DataVisualization" : 75, "VirtualReality" : 70 }, "Remark" : "Excellent" }
>
```

```
Command Prompt - mongo
Remark" : "Excellent" }
> db.RJ.find().pretty()
{
  "_id" : ObjectId("60e34764eb56434dc0c39b36"),
  "Name" : "Ritvik",
  "Class" : "MSc DSAI",
  "RollNo" : 2,
  "SubjMarks" : {
    "BigData" : 51,
    "MachineLearning" : 56,
    "DataVisualization" : 65,
    "VirtualReality" : 61
  },
  "Remark" : "VeryGood"
},
{
  "_id" : ObjectId("60e347faeb56434dc0c39b37"),
  "Name" : "Manish",
  "Class" : "MSc DSAI",
  "RollNo" : 3,
  "SubjMarks" : {
    "BigData" : 31,
    "MachineLearning" : 26,
    "DataVisualization" : 25,
    "VirtualReality" : 61
  },
  "Remark" : "VeryGood"
},
{
  "_id" : ObjectId("60e48fee805c3046d2121912"),
  "Name" : "ManojYadav",
  "Class" : "MSc DSAI",
  "RollNo" : 4,
  "SubjMarks" : {
    "BigData" : 41,
    "MachineLearning" : 36,
    "DataVisualization" : 55,
    "VirtualReality" : 41
  },
  "Remark" : "Good"
},
{
  "_id" : ObjectId("60e4901f805c3046d2121913"),
  "Name" : "Akash",
  "Class" : "MSc DSAI",
  "RollNo" : 5,
  "SubjMarks" : {
    "BigData" : 57,
    "MachineLearning" : 66,
    "DataVisualization" : 65,
    "VirtualReality" : 41
  },
  "Remark" : "VeryGood"
},
{
  "_id" : ObjectId("60e49045805c3046d2121914"),
  "Name" : "Akash",
  "Class" : "MSc DSAI",
  "RollNo" : 5,
  "SubjMarks" : {
    "BigData" : 67,
    "MachineLearning" : 70,
    "DataVisualization" : 75,
    "VirtualReality" : 70
  },
  "Remark" : "Excellent"
}
```

```
> db.RJ.update({Name:'Manoj'},{$set:{Name:'ManojYadav'}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
> db.RJ.find()
{ "_id" : ObjectId("60e34764eb56434dc0c39b36"), "Name" : "Ritvik", "Class" : "MSc DSAI", "RollNo" : 2, "SubjMarks" : { "BigData" : 51, "MachineLearning" : 56, "DataVisualization" : 65, "VirtualReality" : 61 }, "Remark" : "VeryGood" }
{ "_id" : ObjectId("60e347faeb56434dc0c39b37"), "Name" : "Manish", "Class" : "MSc DSAI", "RollNo" : 3, "SubjMarks" : { "BigData" : 31, "MachineLearning" : 26, "DataVisualization" : 25, "VirtualReality" : 61 }, "Remark" : "VeryGood" }
{ "_id" : ObjectId("60e48fee805c3046d2121912"), "Name" : "ManojYadav", "Class" : "MSc DSAI", "RollNo" : 4, "SubjMarks" : { "BigData" : 41, "MachineLearning" : 36, "DataVisualization" : 55, "VirtualReality" : 41 }, "Remark" : "Good" }
{ "_id" : ObjectId("60e4901f805c3046d2121913"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 57, "MachineLearning" : 66, "DataVisualization" : 65, "VirtualReality" : 41 }, "Remark" : "VeryGood", "Ramrk" : "VeryGood" }
{ "_id" : ObjectId("60e49045805c3046d2121914"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 67, "MachineLearning" : 70, "DataVisualization" : 75, "VirtualReality" : 70 }, "Remark" : "Excellent" }
{ "_id" : ObjectId("60e49746805c3046d2121915"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 67, "MachineLearning" : 70, "DataVisualization" : 75, "VirtualReality" : 70 }, "Remark" : "Excellent" }
>
```



```
Command Prompt - mongo
> db.RJ.updateMany({Remark:'Excellent'},{$set:{Eligible:'True'}})
{ "acknowledged" : true, "matchedCount" : 2, "modifiedCount" : 2 }
> db.RJ.find().pretty()
{
  "_id" : ObjectId("60e34764eb56434dc0c39b36"),
  "Name" : "Ritvik",
  "Class" : "MSc DSAI",
  "RollNo" : 2,
  "SubjMarks" : {
    "BigData" : 51,
    "MachineLearning" : 56,
    "DataVisualization" : 65,
    "VirtualReality" : 61
  },
  "Remark" : "VeryGood"
}
{
  "_id" : ObjectId("60e347faeb56434dc0c39b37"),
  "Name" : "Manish",
  "Class" : "MSc DSAI",
  "RollNo" : 3,
  "SubjMarks" : {
    "BigData" : 31,
    "MachineLearning" : 26,
    "DataVisualization" : 25,
    "VirtualReality" : 61
  },
  "Remark" : "VeryGood"
}
{
  "_id" : ObjectId("60e48fee805c3046d2121912"),
  "Name" : "ManojYadav",
  "Class" : "MSc DSAI",
  "RollNo" : 4,
  "SubjMarks" : {
    "BigData" : 41,
    "MachineLearning" : 36,
    "DataVisualization" : 55,
    "VirtualReality" : 41
  },
  "Remark" : "Good"
}
{
  "_id" : ObjectId("60e4901f805c3046d2121913"),
  "Name" : "Akash",
  "Class" : "MSc DSAI",
  "RollNo" : 5,
  "SubjMarks" : {
    "BigData" : 57,
    "MachineLearning" : 66,
    "DataVisualization" : 65,
    "VirtualReality" : 41
  },
  "Remark" : "VeryGood"
}
```

```
> db.RJ.deleteOne({Remark:'Bad'})
{ "acknowledged" : true, "deletedCount" : 0 }
> db.RJ.deleteOne({Remark:'Good'})
{ "acknowledged" : true, "deletedCount" : 1 }
> db.RJ.find()
{ "_id" : ObjectId("60e34764eb56434dc0c39b36"), "Name" : "Ritvik", "Class" : "MSc DSAI", "RollNo" : 2, "SubjMarks" : { "BigData" : 51, "MachineLearning" : 56, "DataVisualization" : 65, "VirtualReality" : 61 }, "Remark" : "VeryGood" }
{ "_id" : ObjectId("60e347faeb56434dc0c39b37"), "Name" : "Manish", "Class" : "MSc DSAI", "RollNo" : 3, "SubjMarks" : { "BigData" : 31, "MachineLearning" : 26, "DataVisualization" : 25, "VirtualReality" : 61 }, "Remark" : "VeryGood" }
{ "_id" : ObjectId("60e4901f805c3046d2121913"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 57, "MachineLearning" : 66, "DataVisualization" : 65, "VirtualReality" : 41 }, "Remark" : "VeryGood", "Ramrk" : "VeryGood" }
{ "_id" : ObjectId("60e49045805c3046d2121914"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 67, "MachineLearning" : 70, "DataVisualization" : 75, "VirtualReality" : 70 }, "Remark" : "Excellent", "Eligible" : "True" }
{ "_id" : ObjectId("60e49746805c3046d2121915"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 67, "MachineLearning" : 70, "DataVisualization" : 75, "VirtualReality" : 70 }, "Remark" : "Excellent", "Eligible" : "True" }
>
```

```
> db.RJ.deleteMany({Remark:'VeryGood'})
{ "acknowledged" : true, "deletedCount" : 3 }
> db.RJ.find()
{ "_id" : ObjectId("60e49045805c3046d2121914"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 67, "MachineLearning" : 70, "DataVisualization" : 75, "VirtualReality" : 70 }, "Remark" : "Excellent", "Eligible" : "True" }
{ "_id" : ObjectId("60e49746805c3046d2121915"), "Name" : "Akash", "Class" : "MSc DSAI", "RollNo" : 5, "SubjMarks" : { "BigData" : 67, "MachineLearning" : 70, "DataVisualization" : 75, "VirtualReality" : 70 }, "Remark" : "Excellent", "Eligible" : "True" }
>
```