

BDA LAB
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Mongo DB

```
mongo
MongoDB shell version v3.6.8
connecting to: mongodb://127.0.0.1:27017
Implicit session: session { "id" : UUID("d78fa842-7753-4367-a579-27b85d9b9509") }
MongoDB server version: 3.6.8
Server has startup warnings:
2022-04-11T18:54:16.661+0530 I STORAGE [initandlisten]
2022-04-11T18:54:16.661+0530 I STORAGE [initandlisten] ** WARNING: Using the XFS filesystem is
strongly recommended with the WiredTiger storage engine
2022-04-11T18:54:16.661+0530 I STORAGE [initandlisten] **      See http://dochub.mongodb.org/core/
prodnotes-filesystem
2022-04-11T18:54:22.246+0530 I CONTROL [initandlisten]
2022-04-11T18:54:22.246+0530 I CONTROL [initandlisten] ** WARNING: Access control is not enabled for
the database.
2022-04-11T18:54:22.246+0530 I CONTROL [initandlisten] **      Read and write access to data and
configuration is unrestricted.
2022-04-11T18:54:22.246+0530 I CONTROL [initandlisten]
```

```
-----
show dbs
admin      0.000GB
anDB       0.000GB
antara_db  0.000GB
config     0.000GB
local      0.000GB
mallikadb  0.000GB
myDB       0.000GB
mydb_antara 0.000GB
```

```
-----
> use malddb
switched to db malddb
```

-----**STUDENT**-----

```
> db.createCollection("Student");
{ "ok" : 1 }
```

```
-----
> db.createCollection("Marks");
{ "ok" : 1 }
> db.Marks.drop();
true
```

```
-----
> db.Student.insert({_id:1,StudName:"MikeSmith",Grade:"VII",Hobbies:"InternetSurfing"});
WriteResult({ "nInserted" : 1 })
-----
```

```
> db.Student.update({_id:3,StudName:"AryanDavid",Grade:"VII"},{$set:{Hobbies:"Skating"}},{upsert:true});
WriteResult({ "nMatched" : 0, "nUpserted" : 1, "nModified" : 0, "_id" : 3 })
```

```
-----

> db.Student.find({StudName:"AryanDavid"});
{ "_id" : 3, "Grade" : "VII", "StudName" : "AryanDavid", "Hobbies" : "Skating" }
```

```
-----

> db.Student.find({}, {StudName:1,Grade:1,_id:0});
{ "StudName" : "MikeSmith", "Grade" : "VII" }
{ "Grade" : "VII", "StudName" : "AryanDavid" }
```

```
-----

> db.Student.find({Grade:{$eq:"VII"}}).pretty();
{
  "_id" : 1,
  "StudName" : "MikeSmith",
  "Grade" : "VII",
  "Hobbies" : "InternetSurfing"
}
{
  "_id" : 3,
  "Grade" : "VII",
  "StudName" : "AryanDavid",
  "Hobbies" : "Skating"
}
```

```
-----

> db.Student.find({Hobbies:{$in:["Chess","Skating"]}}).pretty ();
{
  "_id" : 3,
  "Grade" : "VII",
  "StudName" : "AryanDavid",
  "Hobbies" : "Skating"
}
```

```
-----

> db.Student.find({StudName:/^M/}).pretty();
{
  "_id" : 1,
  "StudName" : "MikeSmith",
  "Grade" : "VII",
  "Hobbies" : "InternetSurfing"
}
```

```
-----

> db.Student.find({StudName:/e/}).pretty();
{
  "_id" : 1,
  "StudName" : "MikeSmith",
  "Grade" : "VII",
  "Hobbies" : "InternetSurfing"
}
```

```
> db.Student.count();
2
```

```
-----

> db.Student.find().sort({StudName:-1}).pretty();
{
  "_id" : 1,
  "StudName" : "MikeSmith",
  "Grade" : "VII",
  "Hobbies" : "InternetSurfing"
}
{
  "_id" : 3,
  "Grade" : "VII",
  "StudName" : "AryanDavid",
  "Hobbies" : "Skating"
}
```

```
-----

> db.Student.update({_id:4},{ $set:{Location:"Network"}});
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
```

```
-----

> db.Student.find({_id:1},{StudName:1,Grade:1,_id:0});
{ "StudName" : "MikeSmith", "Grade" : "VII" }
```

```
-----

> db.Student.find({Grade:{$ne:"VII"}}).pretty();
```

```
-----

> db.Student.find({StudName:/s$/}).pretty();
```

```
-----

> db.Student.insert({_id:5,StudName:"GraceJohnsons",Grade:"VI",Hobbies:"Reading"});
WriteResult({ "nInserted" : 1 })
```

```
> db.Student.find({StudName:/s$/}).pretty();
{
  "_id" : 5,
  "StudName" : "GraceJohnsons",
  "Grade" : "VI",
  "Hobbies" : "Reading"
}
```

```
-----

> db.Students.update({_id:3},{ $set:{Location:null}})
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
```

```
-----

> db.Student.find({Grade:{$ne:"VII"}}).pretty();
{
  "_id" : 5,
```

```
"StudName" : "GraceJohnsons",
"Grade" : "VI",
"Hobbies" : "Reading"
}
```

```
> db.Students.update({_id:3},{set:{Location:null}})
WriteResult({ "nMatched" : 0, "nUpserted" : 0, "nModified" : 0 })
```

```
> db.Student.find({Grade:{Seq:"VII"}}).pretty();
{
  "_id" : 1,
  "StudName" : "MikeSmith",
  "Grade" : "VII",
  "Hobbies" : "InternetSurfing"
}
{
  "_id" : 3,
  "Grade" : "VII",
  "StudName" : "AryanDavid",
  "Hobbies" : "Skating"
}
```

```
> db.Student.find({}, {_id:1,Location:1});
{ "_id" : 1 }
{ "_id" : 3 }
{ "_id" : 5 }
```

```
> db.Student.count();
3
```

```
> db.Student.count({Grade:"VII"});
2
```

```
> db.Student.find({Grade:"VII"}).limit(3).pretty();
{
  "_id" : 1,
  "StudName" : "MikeSmith",
  "Grade" : "VII",
  "Hobbies" : "InternetSurfing"
}
{
  "_id" : 3,
  "Grade" : "VII",
  "StudName" : "AryanDavid",
  "Hobbies" : "Skating"
}
```

```
> db.Student.find().sort({StudName:1}).pretty();
{
  "_id" : 3,
  "Grade" : "VII",
  "StudName" : "AryanDavid",
  "Hobbies" : "Skating"
}
{
  "_id" : 5,
  "StudName" : "GraceJohnsons",
  "Grade" : "VI",
  "Hobbies" : "Reading"
}
{
  "_id" : 1,
  "StudName" : "MikeSmith",
  "Grade" : "VII",
  "Hobbies" : "InternetSurfing"
}
```

```
> db.Student.find().skip(2).pretty()
{
  "_id" : 5,
  "StudName" : "GraceJohnsons",
  "Grade" : "VI",
  "Hobbies" : "Reading"
}
```

-----FOOD-----

```
> db.createCollection("Food");
{ "ok" : 1 }
```

```
> db.food.insert({_id:1,fruits:["grapes","mango","apple"]});
WriteResult({ "nInserted" : 1 })
```

```
> db.food.insert({_id:2,fruits:["grapes","mango","cherry"]});
WriteResult({ "nInserted" : 1 })
```

```
> db.food.insert({_id:3,fruits:["banana","mango"]});
WriteResult({ "nInserted" : 1 })
```

```
> db.food.find({fruits:["grapes","mango","apple"]}).pretty();
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
```

```
> db.food.find({"fruits.1":"mango"});
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{ "_id" : 2, "fruits" : [ "grapes", "mango", "cherry" ] }
{ "_id" : 3, "fruits" : [ "banana", "mango" ] }
```

```
-----
> db.food.find({_id:1},{"fruits":{"$slice:2}});
{ "_id" : 1, "fruits" : [ "grapes", "mango" ] }
```

```
-----
> db.food.find({"fruits":{"$size:2}});
{ "_id" : 3, "fruits" : [ "banana", "mango" ] }
```

```
-----
> db.food.find({_id:1},{"fruits":{"$slice:2}});
{ "_id" : 1, "fruits" : [ "grapes", "mango" ] }
```

```
-----
> db.food.find({fruits:{$all:["mango","grapes"]}});
{ "_id" : 1, "fruits" : [ "grapes", "mango", "apple" ] }
{ "_id" : 2, "fruits" : [ "grapes", "mango", "cherry" ] }
```

```
-----
> db.food.update({_id:3},{$set:{"fruits.1":"apple"}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
```

```
-----
> db.food.update({_id:2},{$push:{price:{grapes:80,mango:200,cherry:100}}});
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 1 })
-----
```