

QUERIES

```
use myDB;
show dbs;
db.user.insert({name: "Ada Lovelace", age: 20});
db;
use myDB1;
db.dropDatabase();
db;
db.version()
db.stats()
db.help()
db.createCollection("person");
show collections;
db.createCollection("food");
db.food.drop();
show collections;
```

insert()

```
db.Students.insert({_id:1,StudName:"Michell
Jacintha",Grade:"VII",Hobbies:"Internet Surfing"});
db.Students.find();
db.Students.find().pretty();
db.Students.insert({_id:2,StudName:"Mabel
Mathews",Grade:"VII",Hobbies:"Baseball"});
db.Students.insertMany([{_id:1,StudName:"Michell
Jacintha",Grade:"VII",Hobbies:"Internet Surfing"},{_id:2,StudName:"Mabel
Mathews",Grade:"VII",Hobbies:"Baseball"}]);
```

Update ()

```
db.Students.update({_id:3,StudName:"Aryan
David",Grade:"VII"},{$set:{Hobbies:"Skating"}},{upsert:true});
db.Students.find({_id:3});
db.Students.update({_id:4,StudName:"Hersch
Gibbs",Grade:"VII"},{$set:{Hobbies:"Graffiti"}},{upsert:false});
db.Students.find().pretty();
db.Students.update({_id:4,StudName:"Hersch
Gibbs",Grade:"VII"},{$set:{Hobbies:"Graffiti"}},{upsert:true});
db.Students.find();
db.Students.find({_id:4}).pretty();
db.Students.update({_id:4},{$set:{Location:"Newark"}});
db.Students.find({_id:4}).pretty();
db.Students.update({_id:3},{$set:{Hobbies:"Chess"}});
db.Students.find({_id:3}).pretty();
db.Students.update({},{$set:{Hobbies: "Skating"}},{multi:true})
```

save ()

```
db.Students.find().pretty();
db.Students.save({StudName:"Vamsi Bapat",Grade:"VI"});
db.Students.find().pretty();
```

remove ()

```
db.Students.find({_id:4}).pretty();
db.Students.update({_id:4},{ $unset:{Location:"Newark"}});
db.Students.remove({StudName:"Vamsi Bapat"});
db.Students.find({_id:4}).pretty();
```

find()

```
db.Students.save({StudName:"Vamsi Bapat",Grade:"VI"});
db.Students.find().pretty();
db.Students.find({StudName:"Aryan David"});
db.Students.find({StudName:"Aryan David"}).pretty();
db.Students.find({}, {StudName:1, _id:0});
db.Students.find({}, {StudName:1, Grade:1, _id:0});
db.Students.find({_id:1}, {StudName:1, Grade:1});
db.Students.find({_id:1}, {StudName:1, Grade:1, _id:0});
db.Students.find({Grade:{ $eq:"VII" }}).pretty();
db.Students.find({Grade:{ $ne:"VII" }}).pretty();
db.Students.find({Hobbies:{ $in:["Chess","Skating"] }}).pretty();
db.Students.find({Hobbies:{ $nin:["Chess","Skating"] }}).pretty();
db.Students.find({Hobbies : "Graffiti", StudName:"Hersch
Gibbs"}).pretty();
db.Students.find({StudName:/^M/}).pretty();
db.Students.find({StudName:/s$/}).pretty();
db.Students.find({StudName:/e/}).pretty();
db.Students.find({StudName:{ $regex:"e" }}).pretty();
db.Students.find({StudName:{ $regex:"a$" }}).pretty();
db.Students.find({StudName:{ $regex:"^M" }}).pretty();
```

null values

```
db.Students.find({ $or:[{ _id:3},{ _id:4}]});
db.Students.update({_id:3},{ $set:{Location:null}});
db.Students.update({_id:4},{ $set:{Location:null}});
db.Students.find({Location:{ $eq:null}});
db.Students.find();
db.Students.update({_id:3},{ $unset:{Location:null}});
db.Students.update({_id:4},{ $unset:{Location:null}});
db.Students.find();
db.Students.find().pretty();
```

Count, Limit, Sort and Skip

```
db.Students.count();
db.Students.count({Grade:"VII"});
db.Students.find({Grade:"VII"}).limit(3).pretty();
db.Students.find().sort({StudName:1}).pretty();
db.Students.find().sort({StudName:-1}).pretty();
```

```

db.Students.find().sort({Grade:1, Hobbies:-1}).pretty();
db.Students.find().sort({Grade:1, Hobbies:1}).pretty();
db.Students.find().skip(2).pretty();
db.Students.find().skip(1).pretty().sort({StudName:1});
db.Students.find().pretty().skip(db.Students.count()-2);
db.Students.find().pretty().skip(2).limit(3);

```

Arrays:

```

db.food.insert({_id:1,fruits:["banana","apple","cherry"]});
db.food.insert({_id:2,fruits:["orange","butterfruit","mango"]});
db.food.insert({_id:3,fruits:["pineapple","strawberry","grapes"]});
db.food.insert({_id:4,fruits:["banana","strawberry","grapes"]});
db.food.insert({_id:5,fruits:["orange","grapes"]});
db.food.find();
db.food.find({});
db.food.find({fruits:["banana","apple","cherry"]}).pretty();
db.food.find({fruits:"banana"});
db.food.find({"fruits.1":"grapes"});
db.food.find({"fruits.2":"grapes"});
db.food.find({fruits:$size:2});
db.food.find({fruits:$size:3});
db.food.find({_id:1},{fruits:$slice:2});
db.food.find({fruits:$all:["orange","grapes"]}).pretty();
db.food.find({"fruits.0":"orange"}).pretty();
db.food.find({_id:1},{fruits:$slice:[0,2]});
db.food.find({_id:1},{fruits:$slice:[1,2]});
db.food.find({_id:1},{fruits:$slice:[2,3]});

```

Update on the Array:

```

db.food.find({});
db.food.update({_id:4},{ $set:{fruits.1:"apple"}});
db.food.find({_id:4});
db.food.update({_id:1,"fruits":"apple"},{ $set:{fruits.1:"An apple"}});
db.food.find({_id:1});
db.food.update({_id:2},{ $push:{price:{orange:60,butterfruit:200,mango:120}}});
db.food.find().pretty();
db.food.update({_id:4},{ $addToSet:{fruits:"orange"}});
db.food.find().pretty();
db.food.update({_id:4},{ $pop:{fruits:1}});
db.food.find().pretty();
db.food.update({_id:4},{ $pop:{fruits:-1}});
db.food.find().pretty();
db.food.find({_id:3});
db.food.update({_id:3},{ $pullAll:{fruits:["pineapple","grapes"]}});
db.food.find({_id:3});
db.food.update({fruits:"banana"},{ $pull:{fruits:"banana"}});
db.food.find().pretty();
db.food.find({_id:4}).pretty();
db.food.update({_id:4},{ $unset:{fruits.1:null}});
db.food.update({_id:4},{ $pull:{fruits:null}});
db.food.find({_id:4}).pretty();

```

Aggregate function

```
db.Customers.insert([{"CustID":"C123",AccBal:500,AccType:"S"}, {"CustID":"C123",AccBal:900,AccType:"S"}, {"CustID":"C111",AccBal:1200,AccType:"S"}, {"CustID":"C123",AccBal:1500,AccType:"C"}]);
db.Customers.find().pretty();
db.Customers.aggregate({$group:{_id: "$CustID",TotAccBal:{$sum: "$AccBal"}}});
db.Customers.aggregate({$match:{AccType:"S"}},{$group:{_id: "$CustID",TotAccBal:{$sum: "$AccBal"}}});
db.Customers.aggregate({$match:{AccType:"S"}},{$group:{_id: "$CustID",TotAccBal:{$sum: "$AccBal"}}},{$match:{TotAccBal:{$gt:1200}}});
db.Customers.aggregate({$group:{_id:"$CustID",TotAccBal:{$avg:"$AccBal"}}});
);
db.Customers.aggregate({$group:{_id:"$CustID",TotAccBal:{$max:"$AccBal"}}});
);
db.Customers.aggregate({$group:{_id:"$CustID",TotAccBal:{$min:"$AccBal"}}});
);
```