**LABORATORY PROGRAM -1**

**MONGO DB CRUD OPERATIONS**

**I. CREATE DATABASE IN MONGODB.**

mongosh

use myDB;

db;

show dbs;

**II. CRUD (CREATE, READ, UPDATE, DELETE) OPERATIONS**

db.createCollection(“Student”);

db.Student.insert({id:1,StudName:"MichelleJacintha",Grade:"VII",Hobbies:"InternetSurfing"});

db.Student.update({id:3,StudName:"AryanDavid",Grade:"VII"},{$set:{Hobbies:"Skating"}},{upsert:true});

db.Student.find({StudName:"Aryan David"});

db.Student.find({},{StudName:1,Grade:1,\_id:0});

db.Student.find({Grade:{$eq:'VII'}}).pretty();

db.Student.find({Hobbies :{ $in: ['Chess','Skating']}}).pretty ();

db.Student.find({StudName:/^M/}).pretty();

db.Student.find({StudName:/e/}).pretty();

**III.**

db.Student.count();

**IV.**

db.Student.find().sort({StudName:-1}).pretty();

db.Student.drop();

**V.**

db.Students.insert({StudName:”Vamsi”, Grade:”VI”})

**VI.**

db.Students.update({\_id:4},{$set:{Location:”Network”}})

**VII.**

db.Students.update({\_id:4},{$unset:{Location:”Network”}})

**VIII.**

db.Student.find({\_id:1},{StudName:1,Grade:1,\_id:0});

db.Student.find({Grade:{$ne:”VII”}}).pretty();

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

**IX.**

db.Students.update({\_id:3},{$set:{Location:null}})

**X.**

db.Students.count()

**XI.**

db.Students.count({Grade:”VII”})

db.Students.find({Grade:”VII”}).limit(3).pretty();

db.Students.find().sort({StudName:1}).pretty();

db.Students.find().skip(2).pretty()

**XII.**

db.food.insert( { id:1, fruits:['grapes','mango','apple'] } )  
db.food.insert( { \_id:2, fruits:[‘grapes’,’mango’,’cherry’] } )  
db.food.insert( { \_id:3, fruits:[‘banana’,’mango’] } )

To find in “fruits” array having “mango” in the first index position.  
db.food.find ( {‘fruits.1’:’grapes’} )

To find those documents from the “food” collection where the size of the array is two.  
db.food.find ( {“fruits”: {$size:2}} )

To find the document with a particular id and display the first two elements from the  
array “fruits”  
db.food.find({\_id:1},{“fruits”:{$slice:2}})

To find all the documets from the food collection which have elements mango and  
grapes in the array “fruits”  
db.food.find({fruits:{$all:[“mango”,”grapes”]}})

Update on Array:  
Using particular id replace the element present in the 1st index position of the fruits  
array with apple  
db.food.update({\_id:3},{$set:{‘fruits.1’:’apple’}})

Insert new key value pairs in the fruits array  
db.food.update({\_id:2},{$push:{price:{grapes:80,mango:200,cherry:100}}})



