**Problem Statement: Design and Develop MongoDB Queries using CRUD operations. (Use CRUD operations, SAVE method, logical operators)**

mongo> show dbs;

admin 40.00 KiB

config 72.00 KiB

local 40.00 KiB

mongo> use demo;

switched to db demo

**//insert operation**

demo> db.stud.insertOne({Name:'Shital',rollno:101,marks:45,age:15,class:'TE'});

{

acknowledged: true,

insertedId: ObjectId("67136e8081acba2f2c67c486")

}

demo> db.stud.insertOne({Name:'Priya',rollno:102,marks:55,age:21,class:'TE'});

{

acknowledged: true,

insertedId: ObjectId("67136eae81acba2f2c67c487")

}

demo> db.stud.insertOne({Name:'Kiran',rollno:103,marks:65,age:20,class:'TE'});

{

acknowledged: true,

insertedId: ObjectId("67136ece81acba2f2c67c488")

}

demo> db.stud.insertOne({Name:'Salman',rollno:104,marks:75,age:21,class:'TE'});

{

acknowledged: true,

insertedId: ObjectId("67136ef281acba2f2c67c489")

}

**//find operation**

demo> db.stud.find().pretty();

[

{

\_id: ObjectId("67136e8081acba2f2c67c486"),

Name: 'Shital',

rollno: 101,

marks: 45,

age: 15,

class: 'TE'

},

{

\_id: ObjectId("67136eae81acba2f2c67c487"),

Name: 'Priya',

rollno: 102,

marks: 55,

age: 21,

class: 'TE'

},

{

\_id: ObjectId("67136ece81acba2f2c67c488"),

Name: 'Kiran',

rollno: 103,

marks: 65,

age: 20,

class: 'TE'

},

{

\_id: ObjectId("67136ef281acba2f2c67c489"),

Name: 'Salman',

rollno: 104,

marks: 75,

age: 21,

class: 'TE'

}

]

**//Shows all documents whose rollno>103**

demo> db.stud.find({rollno:{$gt:103}});

[

{

\_id: ObjectId("67136ef281acba2f2c67c489"),

Name: 'Salman',

rollno: 104,

marks: 75,

age: 21,

class: 'TE'

}

]

**//Shows all documents whose rno<103**

demo> db.stud.find({rollno:{$lt:103}});

[

{

\_id: ObjectId("67136e8081acba2f2c67c486"),

Name: 'Shital',

rollno: 101,

marks: 45,

age: 15,

class: 'TE'

},

{

\_id: ObjectId("67136eae81acba2f2c67c487"),

Name: 'Priya',

rollno: 102,

marks: 55,

age: 21,

class: 'TE'

}

]

**//Shows all documents whose rollno greater than 101 and less than 104**

demo> db.stud.find({rollno:{$gt:101,$lt:104}});

[

{

\_id: ObjectId("67136eae81acba2f2c67c487"),

Name: 'Priya',

rollno: 102,

marks: 55,

age: 21,

class: 'TE'

},

{

\_id: ObjectId("67136ece81acba2f2c67c488"),

Name: 'Kiran',

rollno: 103,

marks: 65,

age: 20,

class: 'TE'

}

]

**//Sort on marks field in Descending order(-1)**

demo> db.stud.find().sort({marks:-1});

[

{

\_id: ObjectId("67136ef281acba2f2c67c489"),

Name: 'Salman',

rollno: 104,

marks: 75,

age: 21,

class: 'TE'

},

{

\_id: ObjectId("67136ece81acba2f2c67c488"),

Name: 'Kiran',

rollno: 103,

marks: 65,

age: 20,

class: 'TE'

},

{

\_id: ObjectId("67136eae81acba2f2c67c487"),

Name: 'Priya',

rollno: 102,

marks: 55,

age: 21,

class: 'TE'

},

{

\_id: ObjectId("67136e8081acba2f2c67c486"),

Name: 'Shital',

rollno: 101,

marks: 45,

age: 15,

class: 'TE'

}

]

**//Returns no of documents in the collection**

demo> db.stud.find().count();

4

**//Returns only first 2 documents**

demo> db.stud.find().limit(2);

[

{

\_id: ObjectId("67136e8081acba2f2c67c486"),

Name: 'Shital',

rollno: 101,

marks: 45,

age: 15,

class: 'TE'

},

{

\_id: ObjectId("67136eae81acba2f2c67c487"),

Name: 'Priya',

rollno: 102,

marks: 55,

age: 21,

class: 'TE'

}

]

**//Returns all documents except first 3 documents**

demo> db.stud.find().skip(3);

[

{

\_id: ObjectId("67136ef281acba2f2c67c489"),

Name: 'Salman',

rollno: 104,

marks: 75,

age: 21,

class: 'TE'

}

]

**//> Set age = 20 where rollno is 101, Only the age field of one document is updated where condition is matched** .

demo> db.stud.updateOne({rollno:101},{$set:{age:20}}) ;

{

acknowledged: true,

insertedId: null,

matchedCount: 1,

modifiedCount: 1,

upsertedCount: 0

}

**// Set age = 20 where name is “Priya”, Only the age field of one document is updated where condition is matched .**

demo> db.stud.updateOne({name:'Priya'},{$set:{age:20}}) ;

{

acknowledged: true,

insertedId: null,

matchedCount: 0,

modifiedCount: 0,

upsertedCount: 0

}

**//find operation:Shows all the documents**

demo> db.stud.find();

[

{

\_id: ObjectId("67136e8081acba2f2c67c486"),

Name: 'Shital',

rollno: 101,

marks: 45,

age: 20,

class: 'TE'

},

{

\_id: ObjectId("67136eae81acba2f2c67c487"),

Name: 'Priya',

rollno: 102,

marks: 55,

age: 21,

class: 'TE'

},

{

\_id: ObjectId("67136ece81acba2f2c67c488"),

Name: 'Kiran',

rollno: 103,

marks: 65,

age: 20,

class: 'TE'

},

{

\_id: ObjectId("67136ef281acba2f2c67c489"),

Name: 'Salman',

rollno: 104,

marks: 75,

age: 21,

class: 'TE'

}

]

**//delete operation:Delete the document where roll no is 104**

demo> db.stud.deleteOne({rollno:104});

{ acknowledged: true, deletedCount: 1 }

demo> db.stud.find();

[

{

\_id: ObjectId("67136e8081acba2f2c67c486"),

Name: 'Shital',

rollno: 101,

marks: 45,

age: 20,

class: 'TE'

},

{

\_id: ObjectId("67136eae81acba2f2c67c487"),

Name: 'Priya',

rollno: 102,

marks: 55,

age: 21,

class: 'TE'

},

{

\_id: ObjectId("67136ece81acba2f2c67c488"),

Name: 'Kiran',

rollno: 103,

marks: 65,

age: 20,

class: 'TE'

}

]