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DBMSL

Assignment 9

Design and develop MongoDB queries using CRUD operations. (Use CRUD operations, SAVE method, logical operators).

Queries (with outputs) -

1. mydb> db.createCollection("mycollection")

```
mydb> db.createCollection("mycollection")
{ ok: 1 }
```

2. mydb> db.mycollection.insertOne({name:"ANUSHREE",age:20})

```
mydb> db.mycollection.insertOne({name:"ANUSHREE",age:20})
{
  acknowledged: true,
  insertedId: ObjectId('66ea52333a3ba29b03964033')
}
```

3. mydb> db.mycollection.find({});

```
mydb> db.mycollection.find({});
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 20
  }
]
```

4. mydb>db.mycollection.insertMany([{name:"DHANSHREE",age:21},
{name:"SHREEJA",age:19},{name:"ADITYA",age:20}])

```
mydb> db.mycollection.insertMany([{"name":"DHANSHREE",age:21},{"name":"SHREEJA",age:19},{
name:"ADITYA",age:20}])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('66ea52ae3a3ba29b03964034'),
    '1': ObjectId('66ea52ae3a3ba29b03964035'),
    '2': ObjectId('66ea52ae3a3ba29b03964036')
  }
}
```

```
mydb> db.mycollection.find({});
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 20
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964034'),
    name: 'DHANSHREE',
    age: 21
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964035'),
    name: 'SHREEJA',
    age: 19
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 20
  }
]
```

5. **mydb> db.mycollection.findOne({name:"ANUSHREE"})**

```
mydb> db.mycollection.findOne({name:"ANUSHREE"})
{
  _id: ObjectId('66ea52333a3ba29b03964033'),
  name: 'ANUSHREE',
  age: 20
}
```

6. **mydb> db.mycollection.find({ age: { \$gt: 19 } });**

```
mydb> db.mycollection.find({ age: { $gt: 19 } });
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 20
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964034'),
    name: 'DHANSHREE',
    age: 21
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 20
  }
]
```

7. **mydb> db.mycollection.updateOne({name:"ANUSHREE"},{\$set:{age:21}});**

```

mydb> db.mycollection.updateOne({name:"ANUSHREE"},{$set:{age:21}});
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
mydb> db.mycollection.find().pretty();
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 21
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964034'),
    name: 'DHANSHREE',
    age: 21
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964035'),
    name: 'SHREEJA',
    age: 19
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 20
  }
]

```

8. mydb> db.mycollection.updateMany({},{\$inc:{age:1}});

```

mydb> db.mycollection.updateMany({},{$inc:{age:1}});
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 4,
  modifiedCount: 4,
  upsertedCount: 0
}
mydb> db.mycollection.find().pretty();
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964034'),
    name: 'DHANSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964035'),
    name: 'SHREEJA',
    age: 20
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 21
  }
]

```

9. `mydb> db.mycollection.deleteOne({name:"SHREEJA"});`

```
mydb> db.mycollection.deleteOne({name:"SHREEJA"});
{ acknowledged: true, deletedCount: 1 }
mydb> db.mycollection.find().pretty();
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964034'),
    name: 'DHANSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 21
  }
]
```

10. `mydb> db.mycollection.insertOne({name:"HARSHITA",age:20})`

```
mydb> db.mycollection.insertOne({name:"HARSHITA",age:20})
{
  acknowledged: true,
  insertedId: ObjectId('66ea55303a3ba29b03964037')
}
mydb> db.mycollection.find().pretty();
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964034'),
    name: 'DHANSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 21
  },
  {
    _id: ObjectId('66ea55303a3ba29b03964037'),
    name: 'HARSHITA',
    age: 20
  }
]
```

11. `mydb> db.mycollection.deleteMany({age:{$lt:21}})`

```

mydb> db.mycollection.deleteMany({age:{$lt:21}})
{ acknowledged: true, deletedCount: 1 }
mydb> db.mycollection.find().pretty();
[
  {
    _id: ObjectId('66ea52333a3ba29b03964033'),
    name: 'ANUSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964034'),
    name: 'DHANSHREE',
    age: 22
  },
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 21
  }
]

```

12. **mydb> db.mycollection.find({\$and:[{name:"ADITYA"},{age:21}]});**

```

mydb> db.mycollection.find({$and:[{name:"ADITYA"},{age:21}]});
[
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 21
  }
]

```

13. **mydb> db.mycollection.find({\$or:[{name:"ADITYA"},{age:23}]});**

```

mydb> db.mycollection.find({$or:[{name:"ADITYA"},{age:23}]});
[
  {
    _id: ObjectId('66ea52ae3a3ba29b03964036'),
    name: 'ADITYA',
    age: 21
  }
]

```

14. **mydb> db.mycollection.countDocuments({});**

```

mydb> db.mycollection.countDocuments({});
3

```

15. **mydb> db.mycollection.countDocuments({age:{\$gt:21}});**

```

mydb> db.mycollection.countDocuments({age:{$gt:21}});
2

```