

AIM: MongoDB Queries Design and Develop MongoDB Queries using CRUD operations.

1. Collection "orderinfo" which contains the documents given as below

```
{
  cust_id:123
  cust_name:"abc",
  status:"A",
  price:250
}
```

- i. find the average price for each customers having status 'A'
- ii. Display the status of the customers whose amount/price lie between 100 and 1000
- iii. Display the customers information without "_id".
- iv. create a simple index on orderinfo collection and fire the queries.

2. Collection "movies" which contains the documents given as below

```
{
  name: "Movie1",
  type: "action",
  budget:1000000
  producer: {
    name: "producer1",
    address:"PUNE"
  }
}
```

- i. Find the name of the movie having budget greater than 1,00,000.
- ii. Find the name of producer who lives in Pune
- iii. Update the type of movie "action" to "horror"
- iv. Find all the documents produced by name "producer1" with their address

DATABASE AND COLLECTION

```
Assignment9> show collections
```

```
orderinfo
```

```
Assignment9> db.orderinfo.find()
```

```
[
  {
    _id: ObjectId('68bea8f4de85b8bee1fa3354'),
    cust_id: 123,
    cust_name: 'abc',
    status: 'A',
    price: 250
  }
]
```

```
Assignment9> db.movies.insertOne({name:"Movie1", type:"action",budget:1000000,producer:{name: "producer1",address:"PUNE"}})
```

```
{
  acknowledged: true,
  insertedId: ObjectId('68c1164a377c41792afa3350')
}
```

```
Assignment9> db.movies.find()
```

```
[
  {
    _id: ObjectId('68c1164a377c41792afa3350'),
    name: 'Movie1',
    type: 'action',
    budget: 1000000,
    producer: { name: 'producer1', address: 'PUNE' }
  }
]
```

1) i)

```
Assignment9> db.orderinfo.aggregate([{$match:{status:"A"}},{$group:{_id:"$cust_name",avgPrice:{$avg:"$price"}}}])
[ { _id: 'abc', avgPrice: 250 } ]
Assignment9>
```

```
Assignment9> db.orderinfo.find()
[
  {
    _id: ObjectId('68bea8f4de85b8bee1fa3354'),
    cust_id: 123,
    cust_name: 'abc',
    status: 'A',
    price: 250
  }
]
```

1) ii)

```
Assignment9> db.orderinfo.find(
...   { price: { $gte: 100, $lte: 1000 } },
...   { status: 1, _id: 0 }
... )
...
[ { status: 'A' } ]
```

1)

iii and iv

```
Assignment9> db.orderinfo.find({}, {_id:0})
[ { cust_id: 123, cust_name: 'abc', status: 'A', price: 250 } ]
Assignment9> db.orderinfo.createIndex({ cust_id: 1 })
cust_id_1
Assignment9> db.orderinfo.getIndexes()
[
  { v: 2, key: { _id: 1 }, name: '_id_' },
  { v: 2, key: { cust_id: 1 }, name: 'cust_id_1' }
]
Assignment9> db.orderinfo.find({ cust_id: 123 })
[
  {
    _id: ObjectId('68bea8f4de85b8bee1fa3354'),
    cust_id: 123,
    cust_name: 'abc',
    status: 'A',
    price: 250
  }
]
```

2)

i and ii

```
Assignment9> db.movies.find({budget: {$gt: 100000}}, {name: 1, _id: 0})
[ { name: 'Movie1' } ]
Assignment9> db.movies.find({"producer.address": "PUNE"}, {"producer.name": 1, _id: 0})
[ { producer: { name: 'producer1' } } ]
```

2)

iii and iv

```
Assignment9> db.movies.updateMany({type: "action"}, {$set: {type: "horror"}})
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
Assignment9> db.movies.find()
[
  {
    _id: ObjectId('68c1164a377c41792afa3350'),
    name: 'Movie1',
    type: 'horror',
    budget: 1000000,
    producer: { name: 'producer1', address: 'PUNE' }
  }
]
Assignment9> db.movies.find({"producer.name": "producer1"}, {"producer.name": 1, "producer.address": 1, _id: 0})
[ { producer: { name: 'producer1', address: 'PUNE' } } ]
```