MongoDB – LAB 1

Q1)

a) Create a database named **pets** in MongoDB Shell.

Ans=

```
test> use Pet
switched to db Pet
```

b) Create a collection named **mammals.**

Ans=

```
Pet> db.createCollection("mammals")
{ ok: 1 }
```

c) Insert some documents to the mammal's collection with fields **petid, name** and **species**. (Using insertOne())

Ans=

```
Pet> db.mammals.insertOne({ petid: 1, name: "Fluffy", species: "dog" })
{
  acknowledged: true,
  insertedId: ObjectId("6516a737248b6acc3045af0d")
}
Pet> db.mammals.insertOne({ petid: 2, name: "Whiskers", species: "cat" })
{
  acknowledged: true,
  insertedId: ObjectId("6516a737248b6acc3045af0e")
}
Pet> db.mammals.insertOne({ petid: 3, name: "Buddy", species: "dog" })
{
  acknowledged: true,
  insertedId: ObjectId("6516a737248b6acc3045af0f")
}
```

d) Find all the mammals

Ans=

```
Pet> db.mammals.find({})
[
  {
    '0': 'p',
    '1': 'e',
    '2': 't',
    '3': 'i',
    '4': 'd',
    _id: ObjectId("6516a479248b6acc3045af0c")
  },
  {
    _id: ObjectId("6516a737248b6acc3045af0d"),
    petid: 1,
    name: 'Fluffy',
    species: 'dog'
  },
  {
    _id: ObjectId("6516a737248b6acc3045af0e"),
    petid: 2,
    name: 'Whiskers',
    species: 'cat'
  },
  {
    _id: ObjectId("6516a737248b6acc3045af0f"),
    petid: 3,
    name: 'Buddy',
    species: 'dog'
  }
]
```

e) Find all the mammals with "dog" as their species

Ans=

```
Pet> db.mammals.find({ species: "dog" })
[
  {
    _id: ObjectId("6516a737248b6acc3045af0d"),
    petid: 1,
    name: 'Fluffy',
    species: 'dog'
  },
  {
    _id: ObjectId("6516a737248b6acc3045af0f"),
    petid: 3,
    name: 'Buddy',
    species: 'dog'
  }
]
```

f) Create another capped collection named **owner** with maximum 10 documents.

Ans=

```
Pet> db.createCollection("owner", { capped:true, size:9192, max:10 })
{ ok: 1 }
Pet> db.owner.insertMany([  {
```

g) Insert some documents to the owner collection with fields **ownerid, name, city, state** and contact where **contact** is an embedded document containing fields **email** and **mobile**. (Using insertMany()).

Ans=

```
Pet> db.owner.insertMany([{ownerid:1,name:"John doe",city:"Toronto",state:"Ontario",contact:{email:"john@example.com",mobile:"90202200981"}},{ownerid:2,name
:"Roger",city:"Paris",state:"Ile de France",contact:{email:"roger@example.com",mobile:"5023459870"}},{ownerid:3,name:"Rafael",city:"LA",state:"California",c
ontact:{email:"rafael@example.com",mobile:"7090303876"}}])
{
  acknowledged: true,
  insertedIds: {
    '0': ObjectId("6516ae04248b6acc3045af10"),
    '1': ObjectId("6516ae04248b6acc3045af11"),
    '2': ObjectId("6516ae04248b6acc3045af12")
  }
}
```

h) Find all owners residing in a particular city and state.

Ans=

```
Pet> db.owner.find({city:"Toronto",state:"Ontario"})
[
  {
    _id: ObjectId("6516ae04248b6acc3045af10"),
    ownerid: 1,
    name: 'John doe',
    city: 'Toronto',
    state: 'Ontario',
    contact: { email: 'john@example.com', mobile: '90202200981' }
  }
]
Pet>
```

i) Find a particular owner whose mobile is given

Ans=

```
Pet> db.owner.find({"contact.mobile":"7090303876"})
[
  {
    _id: ObjectId("6516ae04248b6acc3045af12"),
    ownerid: 3,
    name: 'Rafael',
    city: 'LA',
    state: 'California',
    contact: { email: 'rafael@example.com', mobile: '7090303876' }
  }
]
Pet>
```

j) Find owners whose email or mobile is given.

Ans=

```
Pet> db.owner.find({ "$or":[{"contact.email":"roger@example.com"},{"contact.mobile":"5023459870"}]})
[
  {
    _id: ObjectId("6516ae04248b6acc3045af11"),
    ownerid: 2,
    name: 'Roger',
    city: 'Paris',
    state: 'Ile de France',
    contact: { email: 'roger@example.com', mobile: '5023459870' }
  }
]
Pet>
```