MongoDB DragsManagmentSystem

Database name:-DragManagementSystem

Collection name:-cutomer,drugs

1)create cutomer collection.

Query:-

```
> use DragManagementSystem
<    'switched to db DragManagementSystem'
> db.customer.insertMany([{
    "customer_name": "Merv",
    "customer_mobile": "4347101473",
    "customer_address": "2nd Floor",
    "cutomer_email": "mvanderhoven0@miitbeian.gov.cn",
    "total_diseases": 9
  }, {
    "customer_name": "Hortense",
    "customer_mobile": "0541243101",
    "customer_address": "PO Box 34209",
    "cutomer_email": "hnelson1@i2i.jp",
    "total_diseases": 5
  }, {
```

O/P:- total 25 records created.

```
<   {
      acknowledged: true,
      insertedIds: {
         '0': ObjectId("6438f32aafb0b3b3cf5112c7"),
         '1': ObjectId("6438f32aafb0b3b3cf5112c8"),
         '2': ObjectId("6438f32aafb0b3b3cf5112c9"),
         '3': ObjectId("6438f32aafb0b3b3cf5112ca"),
         '4': ObjectId("6438f32aafb0b3b3cf5112cb"),
         '5': ObjectId("6438f32aafb0b3b3cf5112cc"),
         '6': ObjectId("6438f32aafb0b3b3cf5112cd"),
         '7': ObjectId("6438f32aafb0b3b3cf5112ce"),
         '8': ObjectId("6438f32aafb0b3b3cf5112cf"),
         '9': ObjectId("6438f32aafb0b3b3cf5112d0"),
         '10': ObjectId("6438f32aafb0b3b3cf5112d1"),
         '11': ObjectId("6438f32aafb0b3b3cf5112d2"),
```

2) create drugs collection.

Query:-

```
> db.drugs.insertMany([{
    "drug_id": 30,
    "drug_name": "Ampicillin",
    "drug_amount": 410,
    "drug_mfgdate": "8/15/2022"
  }, {
    "drug_id": 44,
    "drug_name": "clorazepate dipotassium",
    "drug_amount": 621,
    "drug_mfgdate": "7/21/2022"
  }, {
    "drug_id": 46,
```

O/P:-total 50 records created.

```
<   {
    acknowledged: true,
    insertedIds: {
      '0': ObjectId("6438f6b7afb0b3b3cf5112e0"),
      '1': ObjectId("6438f6b7afb0b3b3cf5112e1"),
      '2': ObjectId("6438f6b7afb0b3b3cf5112e2"),
      '3': ObjectId("6438f6b7afb0b3b3cf5112e3"),
      '4': ObjectId("6438f6b7afb0b3b3cf5112e4"),
      '5': ObjectId("6438f6b7afb0b3b3cf5112e5"),
      '6': ObjectId("6438f6b7afb0b3b3cf5112e6"),
      '7': ObjectId("6438f6b7afb0b3b3cf5112e7"),
      '8': ObjectId("6438f6b7afb0b3b3cf5112e8"),
      '9': ObjectId("6438f6b7afb0b3b3cf5112e9"),
      '10': ObjectId("6438f6b7afb0b3b3cf5112ea"),
      '11': ObjectId("6438f6b7afb0b3b3cf5112eb"),
```

3) match all records have a total_diseases=3 in customer collection.

Query:-db.customer.aggregate([

  {

    $match:{total_diseases:3}

  },

],)

O/P:-

```
> db.customer.aggregate([
    {
        $match:{total_diseases:3}
    },
],)
<   {
        _id: ObjectId("6438f32aafb0b3b3cf5112d4"),
        customer_name: 'Barry',
        customer_mobile: '9109249419',
        customer_address: 'Apt 440',
        cutomer_email: 'bmclernond@mail.ru',
        total_diseases: 3
    }
    {
        _id: ObjectId("6438f32aafb0b3b3cf5112de"),
        customer_name: 'Dana',
        customer_mobile: '6109908886',
        customer_address: 'Room 245',
        cutomer_email: 'ddurrandn@yellowbook.com',
        total_diseases: 3
    }
DragManagementSystem >
```

4)match all record have a drug_name=Ampicillin in drugs collection.

Query:-db.drugs.aggregate([

  {

    $match:{drug_name:'Ampicillin'}

  },

],)

O/P:-

```
> db.drugs.aggregate([
    {
        $match:{drug_name:'Ampicillin'}
    },
],)
< {
    _id: ObjectId("6438f6b7afb0b3b3cf5112e0"),
    drug_id: 30,
    drug_name: 'Ampicillin',
    drug_amount: 410,
    drug_mfgdate: '8/15/2022'
}
DragManagementSystem>
```

5) match all records have total_diseases=3,and create group for
_id:$total_diseases and according show ROOT objects all details in details array.

Query:-

db.customer.aggregate([

  {

    $match:{total_diseases:3}

  },

  {

    $group :{_id:'$total_diseases',details:{$push:'$$ROOT'}}

  }

],)
O/P:-

```
<  {
     _id: 3,
     details: [
       {
         _id: ObjectId("6438f32aafb0b3b3cf5112d4"),
         customer_name: 'Barry',
         customer_mobile: '9109249419',
         customer_address: 'Apt 440',
         cutomer_email: 'bmclernond@mail.ru',
         total_diseases: 3
       },
       {
         _id: ObjectId("6438f32aafb0b3b3cf5112de"),
         customer_name: 'Dana',
         customer_mobile: '6109908886',
         customer_address: 'Room 245',
         cutomer_email: 'ddurrandn@yellowbook.com',
         total_diseases: 3
       }
     ]
   }
DragManagementSystem>
```

6)match all records have total_diseases=3 AND customer_name=Barry,then create group for _id:$total_diseases and according show ROOT objects all details in details array.

Query:-

db.customer.aggregate([

   {

$match:{$and: [{total_diseases:3},{customer_name:'Barry'}]}

},

{

$group :{_id:'$total_diseases',details:{$push:'$$ROOT'}}

}

],)

O/P:-

```
db.customer.aggregate([
    {
        $match:{$and: [{total_diseases:3},{customer_name:'Barry'}]}
    },
    {
        $group :{_id:'$total_diseases',details:{$push:'$$ROOT'}}
    }
],)
< {
    _id: 3,
    details: [
      {
        _id: ObjectId("6438f32aafb0b3b3cf5112d4"),
        customer_name: 'Barry',
        customer_mobile: '9109249419',
        customer_address: 'Apt 440',
        cutomer_email: 'bmclernond@mail.ru',
        total_diseases: 3
      }
    ]
  }
DragManagementSystem >|
```

7)match in customer collection have a total_diseases=5 and create group and show only name not all records.

Query:-db.customer.aggregate([

  {

    $match:{total_diseases:5}

  },

  {

    $group :{_id:'$total_diseases',names:{$push:'$customer_name'}}

  }

],)

O/P:-

```
> db.customer.aggregate([
    {
        $match:{total_diseases:5}
    },
    {
        $group :{_id:'$total_diseases',names:{$push:'$customer_name'}}
    }
  ],)
<  {
      _id: 5,
      names: [
        'Hortense',
        'Silvanus',
        'Dawn',
        'Burt',
        'Ingeberg'
      ]
    }
DragManagementSystem>|
```

8)

Query:-db.customer.aggregate([

  { $lookup:

    {

      from: "drugs",

      localField: "customer_name",

      foreignField: "drug_name",

      as: "drugs"

```
        }
    }
])
```

O/P:-

```
    _id: ObjectId("6438f32aafb0b3b3cf5112c7"),
    customer_name: 'Merv',
    customer_mobile: '4347101473',
    customer_address: '2nd Floor',
    cutomer_email: 'mvanderhoven0@miitbeian.gov.cn',
    total_diseases: 9,
    drugs: []
  }
  {
    _id: ObjectId("6438f32aafb0b3b3cf5112c8"),
    customer_name: 'Hortense',
    customer_mobile: '0541243101',
    customer_address: 'PO Box 34209',
    cutomer_email: 'hnelson1@i2i.jp',
    total_diseases: 5,
```

9)

Query:-db.drugs.insertOne({drugname:'Central Nervous System Depressants',drugid:[ObjectId("6438f32aafb0b3b3cf5112c7")],})

O/P:-

```
> db.drugs.insertOne({drugname:'Central Nervous System Depressants',drugid:[ObjectId("6438f32aafb0b3b3cf5112c7")],})
< {
    acknowledged: true,
    insertedId: ObjectId("64392745afb0b3b3cf511312")
  }
```

10)

Query:-db.drugs.aggregate([

  { $lookup:

    {

      from: "customer",

      localField: "drugid",

      foreignField: "_id",

      as: "customer"

    }

  }

])

O/P:-

```
<   {
      _id: ObjectId("64392745afb0b3b3cf511312"),
      drugname: 'Central Nervous System Depressants',
      drugid: [
        ObjectId("6438f32aafb0b3b3cf5112c7")
      ],
      customer: [
        {
          _id: ObjectId("6438f32aafb0b3b3cf5112c7"),
          customer_name: 'Merv',
          customer_mobile: '4347101473',
          customer_address: '2nd Floor',
          cutomer_email: 'mvanderhoven0@miitbeian.gov.cn',
          total_diseases: 9
        }
      ]
    }
```

11)

Query:-db.drugs.insertMany([

 {

   drugname: 'SEO',

   drugid: [

    ObjectId("6438f32aafb0b3b3cf5112c7"),

    ObjectId("6438f32aafb0b3b3cf5112ca")

   ]

 }

])

O/P:-

```
<    {
        acknowledged: true,
        insertedIds: {
          '0': ObjectId("64392b5bafb0b3b3cf511313")
        }
      }
>  db.drugs.find().pretty()
<    {
        _id: ObjectId("64392745afb0b3b3cf511312"),
        drugname: 'Central Nervous System Depressants',
        drugid: [
          ObjectId("6438f32aafb0b3b3cf5112c7")
        ]
      }
      {
        _id: ObjectId("64392b5bafb0b3b3cf511313"),
        drugname: 'SEO',
        drugid: [
          ObjectId("6438f32aafb0b3b3cf5112c7"),
          ObjectId("6438f32aafb0b3b3cf5112ca")
        ]
      }
```

12)

Query:-db.drugs.aggregate([

 {

   $lookup: {

```
      from: "customer",

      localField: "drugid",

      foreignField: "_id",

      as: "customer"

    }

  },

  {

    $match: {

      "customer.customer_name": "Lissie"

    }

  },

  {

    $project: {

      "customer.customer_name": 1

  }

  }

])
```
O/P:-

```
<   {
      _id: ObjectId("64392b5bafb0b3b3cf511313"),
      customer: [
        {
          customer_name: 'Merv'
        },
        {
          customer_name: 'Lissie'
        }
      ]
    }
DragManagementSystem>
```

13)

Query:-db.customer.aggregate([

 {

  $lookup: {

    from: "drugs",

    localField: "_id",

    foreignField: "drugid",

    as: "drugs"

  }

 },

 {

  $match: {

    "drugs.drugname": "SEO"
```

```
        }
    },
    {
      $project: {
        "drugs.drugname": 1
      }
    }
])
```
O/P:-

```
{
    _id: ObjectId("6438f32aafb0b3b3cf5112c7"),
    drugs: [
      {
        drugname: 'Central Nervous System Depressants'
      },
      {
        drugname: 'SEO'
      }
    ]
}
{
    _id: ObjectId("6438f32aafb0b3b3cf5112ca"),
    drugs: [
      {
        drugname: 'SEO'
      }
    ]
}
```