Day - 5 MongoDB Assignment

```
use insuranceDB

switched to db insuranceDB

show tables

db.createCollection('MyCln');

{ ok: 1 }

db.find();

TypeError: db.find is not a function

db.MyCln.find();
```

```
db.policies.insertMany([
  { policyNo: 101, customerName: "Amit",  policyType: "Health", premium:
12000, city: "Delhi",   active: true  },
  { policyNo: 102, customerName: "Neha",  policyType: "Life",   premium:
18000, city: "Mumbai",  active: true  },
  { policyNo: 103, customerName: "Rahul", policyType: "Car",    premium:
9000,  city: "Delhi",   active: false },
  { policyNo: 104, customerName: "Sneha", policyType: "Health", premium:
15000, city: "Chennai", active: true  },
  { policyNo: 105, customerName: "Karan", policyType: "Life",   premium:
22000, city: "Mumbai",  active: false }
])
{
 acknowledged: true,
 insertedIds: {
   '0': ObjectId('695a1602140c69e5575b8079'),
   '1': ObjectId('695a1602140c69e5575b807a'),
   '2': ObjectId('695a1602140c69e5575b807b'),
   '3': ObjectId('695a1602140c69e5575b807c'),
   '4': ObjectId('695a1602140c69e5575b807d')
 }
}
db.policies.find()
{
 _id: ObjectId('695a1602140c69e5575b8079'),
 policyNo: 101,
 customerName: 'Amit',
```

```
  policyType: 'Health',
  premium: 12000,
  city: 'Delhi',
  active: true
}
{
  _id: ObjectId('695a1602140c69e5575b807a'),
  policyNo: 102,
  customerName: 'Neha',
  policyType: 'Life',
  premium: 18000,
  city: 'Mumbai',
  active: true
}
{
  _id: ObjectId('695a1602140c69e5575b807b'),
  policyNo: 103,
  customerName: 'Rahul',
  policyType: 'Car',
  premium: 9000,
  city: 'Delhi',
  active: false
}
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  policyNo: 104,
  customerName: 'Sneha',
  policyType: 'Health',
  premium: 15000,
  city: 'Chennai',
  active: true
}
{
  _id: ObjectId('695a1602140c69e5575b807d'),
```

```
 policyNo: 105,
 customerName: 'Karan',
 policyType: 'Life',
 premium: 22000,
 city: 'Mumbai',
 active: false
}
db.policies.find({ policyType: "Health" })
{
 _id: ObjectId('695a1602140c69e5575b8079'),
 policyNo: 101,
 customerName: 'Amit',
 policyType: 'Health',
 premium: 12000,
 city: 'Delhi',
 active: true
}
{
 _id: ObjectId('695a1602140c69e5575b807c'),
 policyNo: 104,
 customerName: 'Sneha',
 policyType: 'Health',
 premium: 15000,
 city: 'Chennai',
 active: true
}
db.policies.find({ city: "Mumbai" })
{
 _id: ObjectId('695a1602140c69e5575b807a'),
 policyNo: 102,
 customerName: 'Neha',
 policyType: 'Life',
 premium: 18000,
 city: 'Mumbai',
```

```
    active: true
  }
  {
    _id: ObjectId('695a1602140c69e5575b807d'),
    policyNo: 105,
    customerName: 'Karan',
    policyType: 'Life',
    premium: 22000,
    city: 'Mumbai',
    active: false
  }
db.policies.find({}, { customerName: 1, policyType: 1 })
  {
    _id: ObjectId('695a1602140c69e5575b8079'),
    customerName: 'Amit',
    policyType: 'Health'
  }
  {
    _id: ObjectId('695a1602140c69e5575b807a'),
    customerName: 'Neha',
    policyType: 'Life'
  }
  {
    _id: ObjectId('695a1602140c69e5575b807b'),
    customerName: 'Rahul',
    policyType: 'Car'
  }
  {
    _id: ObjectId('695a1602140c69e5575b807c'),
    customerName: 'Sneha',
    policyType: 'Health'
  }
  {
    _id: ObjectId('695a1602140c69e5575b807d'),
```

```
  customerName: 'Karan',
  policyType: 'Life'
}
db.policies.find({}, { _id: 0, customerName: 1, premium: 1 })
{
  customerName: 'Amit',
  premium: 12000
}
{
  customerName: 'Neha',
  premium: 18000
}
{
  customerName: 'Rahul',
  premium: 9000
}
{
  customerName: 'Sneha',
  premium: 15000
}
{
  customerName: 'Karan',
  premium: 22000
}
db.policies.find({}, { premium: 0 })
{
  _id: ObjectId('695a1602140c69e5575b8079'),
  policyNo: 101,
  customerName: 'Amit',
  policyType: 'Health',
  city: 'Delhi',
  active: true
}
{
```

```
  _id: ObjectId('695a1602140c69e5575b807a'),

  policyNo: 102,

  customerName: 'Neha',

  policyType: 'Life',

  city: 'Mumbai',

  active: true

}

{

  _id: ObjectId('695a1602140c69e5575b807b'),

  policyNo: 103,

  customerName: 'Rahul',

  policyType: 'Car',

  city: 'Delhi',

  active: false

}

{

  _id: ObjectId('695a1602140c69e5575b807c'),

  policyNo: 104,

  customerName: 'Sneha',

  policyType: 'Health',

  city: 'Chennai',

  active: true

}

{

  _id: ObjectId('695a1602140c69e5575b807d'),

  policyNo: 105,

  customerName: 'Karan',

  policyType: 'Life',

  city: 'Mumbai',

  active: false

}

db.policies.find({ premium: { $gt: 15000 } })

{

  _id: ObjectId('695a1602140c69e5575b807a'),
```

```
  policyNo: 102,

  customerName: 'Neha',

  policyType: 'Life',

  premium: 18000,

  city: 'Mumbai',

  active: true

}

{

  _id: ObjectId('695a1602140c69e5575b807d'),

  policyNo: 105,

  customerName: 'Karan',

  policyType: 'Life',

  premium: 22000,

  city: 'Mumbai',

  active: false

}
db.policies.find({ active: true })

{

  _id: ObjectId('695a1602140c69e5575b8079'),

  policyNo: 101,

  customerName: 'Amit',

  policyType: 'Health',

  premium: 12000,

  city: 'Delhi',

  active: true

}

{

  _id: ObjectId('695a1602140c69e5575b807a'),

  policyNo: 102,

  customerName: 'Neha',

  policyType: 'Life',

  premium: 18000,

  city: 'Mumbai',

  active: true
```

```
}
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  policyNo: 104,
  customerName: 'Sneha',
  policyType: 'Health',
  premium: 15000,
  city: 'Chennai',
  active: true
}
```

```
db.policies.insertOne({
  policyNo: 106,
  customerName: "Rohit",
  policyType: "Bike",
  premium: 5000,
  city: "Pune",
  active: true
```

```
})
{
  acknowledged: true,
  insertedId: ObjectId('695a17b0140c69e5575b807e')
}
```

```
db.policies.updateOne(
  { policyNo: 101 },
  { $set: { premium: 12000 } }
```

```
)
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 1,
  modifiedCount: 1,
  upsertedCount: 0
}
```

```
db.policies.updateMany(
  { policyType: "Bike" },
  { $set: { active: false } }
```

```
)
{
  acknowledged: true,
```

```
 insertedId: null,
 matchedCount: 2,
 modifiedCount: 1,
 upsertedCount: 0
}
db.policies.deleteOne({ policyNo: 103 })
{
 acknowledged: true,
 deletedCount: 1
}
db.policies.deleteMany({ active: false })
{
 acknowledged: true,
 deletedCount: 2
}
```

```
)
{
 customerName: 'Amit',
 premium: 13000
}
{
 customerName: 'Sneha',
 premium: 15000
}
```

```
)
{
 _id: ObjectId('695a1602140c69e5575b8079'),
 customerName: 'Amit',
 premium: 13000
}
```

```
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  customerName: 'Sneha',
  premium: 15000
}
db.policies.find({ premium: { $gte: 15000 }, city: "Mumbai" })
db.policies.find({ premium: { $lte: 15000 }, city: "Mumbai" })
db.policies.find({ city: { $ne: "Delhi" } })
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  policyNo: 104,
  customerName: 'Sneha',
  policyType: 'Health',
  premium: 15000,
  city: 'Chennai',
  active: true
}
{
  _id: ObjectId('695a17b0140c69e5575b807e'),
  policyNo: 106,
  customerName: 'Rohit',
  policyType: 'Bike',
  premium: 5000,
  city: 'Pune',
  active: true
}
db.policies.find({ premium: { $gt: 10000, $lt: 20000 } })
{
  _id: ObjectId('695a1602140c69e5575b8079'),
  policyNo: 101,
  customerName: 'Amit',
  policyType: 'Health',
  premium: 13000,
  city: 'Delhi',
```

```
    active: true
  }
  {
    _id: ObjectId('695a1602140c69e5575b807c'),
    policyNo: 104,
    customerName: 'Sneha',
    policyType: 'Health',
    premium: 15000,
    city: 'Chennai',
    active: true
  }
```

```
})
  {
    _id: ObjectId('695a1602140c69e5575b8079'),
    policyNo: 101,
    customerName: 'Amit',
    policyType: 'Health',
    premium: 13000,
    city: 'Delhi',
    active: true
  }
```

```
})
  {
    _id: ObjectId('695a17b0140c69e5575b807e'),
    policyNo: 106,
    customerName: 'Rohit',
    policyType: 'Bike',
    premium: 5000,
    city: 'Pune',
    active: true
  }
```

```
db.policies.find({ active: { $exists: false } })
db.policies.find().sort({ premium: -1 })
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  policyNo: 104,
  customerName: 'Sneha',
  policyType: 'Health',
  premium: 15000,
  city: 'Chennai',
  active: true
}
{
  _id: ObjectId('695a1602140c69e5575b8079'),
  policyNo: 101,
  customerName: 'Amit',
  policyType: 'Health',
  premium: 13000,
  city: 'Delhi',
  active: true
}
{
  _id: ObjectId('695a17b0140c69e5575b807e'),
  policyNo: 106,
  customerName: 'Rohit',
  policyType: 'Bike',
  premium: 5000,
  city: 'Pune',
  active: true
}
db.policies.find().sort({ premium: -1 }).limit(2)
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  policyNo: 104,
  customerName: 'Sneha',
```

```
  policyType: 'Health',
  premium: 15000,
  city: 'Chennai',
  active: true
}
{
  _id: ObjectId('695a1602140c69e5575b8079'),
  policyNo: 101,
  customerName: 'Amit',
  policyType: 'Health',
  premium: 13000,
  city: 'Delhi',
  active: true
}
db.policies.find().skip(2)
{
  _id: ObjectId('695a17b0140c69e5575b807e'),
  policyNo: 106,
  customerName: 'Rohit',
  policyType: 'Bike',
  premium: 5000,
  city: 'Pune',
  active: true
}
db.policies.countDocuments({ active: true })
3
db.policies.find({}, { _id: 0, customerName: 1, premium: 1 })
{
  customerName: 'Amit',
  premium: 13000
}
{
  customerName: 'Sneha',
  premium: 15000
```

```
}
{
  customerName: 'Rohit',
  premium: 5000
}
```

```
)
{
  Name: 'Amit',
  Amount: 13000
}
{
  Name: 'Sneha',
  Amount: 15000
}
{
  Name: 'Rohit',
  Amount: 5000
}
```

```
])
{
  _id: ObjectId('695a1602140c69e5575b8079'),
  policyType: 'HEALTH'
}
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  policyType: 'HEALTH'
}
{
  _id: ObjectId('695a17b0140c69e5575b807e'),
  policyType: 'BIKE'
}
```

```
db.policies.aggregate([
    {
        $project: {
            customerName: 1,
            totalPremium: { $multiply: ["$premium", 1.18] }
        }
    }
])
{
  _id: ObjectId('695a1602140c69e5575b8079'),
  customerName: 'Amit',
  totalPremium: 15340
}
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  customerName: 'Sneha',
  totalPremium: 17700
}
{
  _id: ObjectId('695a17b0140c69e5575b807e'),
  customerName: 'Rohit',
  totalPremium: 5900
}
db.policies.aggregate([
    {
        $project: {
            customerName: 1,
            category: {
                $cond: [
                    { $gt: ["$premium", 15000] },
                    "High",
                    "Normal"
                ]
            }
        }
    }
])
{
  _id: ObjectId('695a1602140c69e5575b8079'),
  customerName: 'Amit',
  category: 'Normal'
}
```

```
}
{
  _id: ObjectId('695a1602140c69e5575b807c'),
  customerName: 'Sneha',
  category: 'Normal'
}
{
  _id: ObjectId('695a17b0140c69e5575b807e'),
  customerName: 'Rohit',
  category: 'Normal'
}
```

```
{
  _id: 'Bike',
  avgPremium: 5000
}
{
  _id: 'Health',
  avgPremium: 14000
}
```

```
])
{
  _id: 'Delhi',
  count: 1
}
{
  _id: 'Chennai',
  count: 1
}
```

```
}
{
  _id: 'Pune',
  count: 1
}
```

```
])
{
  _id: 'Health',
  maxPremium: 15000
}
{
  _id: 'Bike',
  maxPremium: 5000
}
```

```
])
```

```
])
{
  _id: 'Health',
  avgPremium: 14000
}
{
  _id: 'Bike',
  avgPremium: 5000
}
```

```
])
{
  _id: 'Delhi',
```

```
   total: 13000
}
{
  _id: 'Chennai',
  total: 15000
}
{
  _id: 'Pune',
  total: 5000
}
```

```
{
  _id: true,
  count: 3
}
```

```
])
```

```
])
{
  _id: 'Health',
  policies: [
    {
      _id: ObjectId('695a1602140c69e5575b8079'),
      policyNo: 101,
      customerName: 'Amit',
      policyType: 'Health',
```

```
      premium: 13000,

      city: 'Delhi',

      active: true

    },

    {

      _id: ObjectId('695a1602140c69e5575b807c'),

      policyNo: 104,

      customerName: 'Sneha',

      policyType: 'Health',

      premium: 15000,

      city: 'Chennai',

      active: true

    }

  ],

  count: 2

}

{

  _id: 'Bike',

  policies: [

    {

      _id: ObjectId('695a17b0140c69e5575b807e'),

      policyNo: 106,

      customerName: 'Rohit',

      policyType: 'Bike',

      premium: 5000,

      city: 'Pune',

      active: true

    }

  ],

  count: 1

}
```

```
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 2,
  modifiedCount: 2,
  upsertedCount: 0
}
db.policies.updateMany(
  {},
  { $set: { lastUpdated: new Date() } }
)
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 3,
  modifiedCount: 3,
  upsertedCount: 0
}
db.policies.updateMany(
  { active: false },
  { $unset: { city: "" } }
)
{
  acknowledged: true,
  insertedId: null,
  matchedCount: 0,
  modifiedCount: 0,
  upsertedCount: 0
}
db.policies.deleteMany({ premium: { $gt: 25000 } })
{
  acknowledged: true,
  deletedCount: 0
}
db.policies.drop()
true
```

insuranceDB