

Exercise: products Collection

Step 1: Create and Insert Data into product

```
db.products.insertMany([
  { product_id: 101, name: "Laptop", category: "Electronics", price: 55000, stock: 10
  },
  { product_id: 102, name: "Mouse", category: "Electronics", price: 700, stock: 50 },
  { product_id: 103, name: "Office Chair", category: "Furniture", price: 4500, stock:
  5 },
  { product_id: 104, name: "Notebook", category: "Stationery", price: 50, stock: 300
  },
  { product_id: 105, name: "Water Bottle", category: "Kitchen", price: 250, stock: 100
  }])
< {
  acknowledged: true,
  insertedIds: {
    '0': ObjectId('687a307a60c5f36e4689eadc'),
    '1': ObjectId('687a307a60c5f36e4689eadd'),
    '2': ObjectId('687a307a60c5f36e4689eade'),
    '3': ObjectId('687a307a60c5f36e4689eadf'),
    '4': ObjectId('687a307a60c5f36e4689eae0')
  }
}
```

Queries to Practice

1. Find all products that are not in the 'Electronics' category.

```
db.products.find({category:{ $ne:"Electronics" } })
```

```
> db.products.find({category:{ $ne:"Electronics" }})
< {
  _id: ObjectId('687a307a60c5f36e4689eade'),
  product_id: 103,
  name: 'Office Chair',
  category: 'Furniture',
  price: 4500,
  stock: 5
}
{
  _id: ObjectId('687a307a60c5f36e4689eadf'),
  product_id: 104,
  name: 'Notebook',
  category: 'Stationery',
  price: 50,
  stock: 300
}
{
  _id: ObjectId('687a307a60c5f36e4689eae0'),
  product_id: 105,
  name: 'Water Bottle',
  category: 'Kitchen',
  price: 250,
  stock: 100
}
```

2. Get all products where price is greater than 1,000.

```
> db.products.find({price:{$gt:1000}})
< {
  _id: ObjectId('687a307a60c5f36e4689eadc'),
  product_id: 101,
  name: 'Laptop',
  category: 'Electronics',
  price: 55000,
  stock: 10
}
{
  _id: ObjectId('687a307a60c5f36e4689eade'),
  product_id: 103,
  name: 'Office Chair',
  category: 'Furniture',
  price: 4500,
  stock: 5
}
```

3. Find products that have stock less than 50.

```
> db.products.find({stock:{$lt:50}})
< {
  _id: ObjectId('687a307a60c5f36e4689eadc'),
  product_id: 101,
  name: 'Laptop',
  category: 'Electronics',
  price: 55000,
  stock: 10
}
{
  _id: ObjectId('687a307a60c5f36e4689eade'),
  product_id: 103,
  name: 'Office Chair',
  category: 'Furniture',
  price: 4500,
  stock: 5
}
```

4. List products whose category is either 'Furniture' or 'Kitchen'.

```
> db.products.find({category:{$in:["Furniture","Kitchen"]}})
< {
  _id: ObjectId('687a307a60c5f36e4689eade'),
  product_id: 103,
  name: 'Office Chair',
  category: 'Furniture',
  price: 4500,
  stock: 5
}
{
  _id: ObjectId('687a307a60c5f36e4689eae0'),
  product_id: 105,
  name: 'Water Bottle',
  category: 'Kitchen',
  price: 250,
  stock: 100
}
```

5. Get products with stock between 10 and 100.

```
> db.products.find({stock:{$gte:10,$lt:100}})
< {
  _id: ObjectId('687a307a60c5f36e4689eadc'),
  product_id: 101,
  name: 'Laptop',
  category: 'Electronics',
  price: 55000,
  stock: 10
}
{
  _id: ObjectId('687a307a60c5f36e4689eadd'),
  product_id: 102,
  name: 'Mouse',
  category: 'Electronics',
  price: 700,
  stock: 50
}
```

6. Find all products where price is not 700.

```
db.products.find(price:{$ne:700}))
```

```
> db.products.find({price:{$ne:700}})
< {
  _id: ObjectId('687a307a60c5f36e4689eadc'),
  product_id: 101,
  name: 'Laptop',
  category: 'Electronics',
  price: 55000,
  stock: 10
}
{
  _id: ObjectId('687a307a60c5f36e4689eade'),
  product_id: 103,
  name: 'Office Chair',
  category: 'Furniture',
  price: 4500,
  stock: 5
}
{
  _id: ObjectId('687a307a60c5f36e4689eadf'),
  product_id: 104,
  name: 'Notebook',
  category: 'Stationery',
  price: 50,
  stock: 300
}
{
  _id: ObjectId('687a307a60c5f36e4689eae0'),
  product_id: 105,
  name: 'Water Bottle',
  category: 'Kitchen',
  price: 250,
  stock: 100
}
```

7. Display all products whose name starts with 'N'.

```
> db.products.find({name:{$regex:"^N"}})
< {
  _id: ObjectId('687a307a60c5f36e4689eadf'),
  product_id: 104,
  name: 'Notebook',
  category: 'Stationery',
  price: 50,
  stock: 300
}
```

8. Find all products whose stock is not more than 5.

```
> db.products.find({stock:{$lte:5}})
< {
  _id: ObjectId('687a307a60c5f36e4689eade'),
  product_id: 103,
  name: 'Office Chair',
  category: 'Furniture',
  price: 4500,
  stock: 5
}
```

9. List products with category not in ['Stationery', 'Kitchen'].

```
db.products.find({category:{$nin:["Stationary", "Kitchen"]}})
```

```
> db.products.find({category:{$nin:["Stationary", "Kitchen"]}})
< {
  _id: ObjectId('687a307a60c5f36e4689eadc'),
  product_id: 191,
  name: 'Laptop',
  category: 'Electronics',
  price: 55000,
  stock: 10
}
{
  _id: ObjectId('687a307a60c5f36e4689eadd'),
  product_id: 192,
  name: 'Mouse',
  category: 'Electronics',
  price: 700,
  stock: 50
}
{
  _id: ObjectId('687a307a60c5f36e4689eade'),
  product_id: 193,
  name: 'Office Chair',
  category: 'Furniture',
  price: 4500,
  stock: 5
}
{
  _id: ObjectId('687a307a60c5f36e4689eadf'),
  product_id: 194,
  name: 'Notebook',
  category: 'Stationery',
  price: 50,
  stock: 300
}
```

10. Find one product not in the 'Furniture' category

```
> db.products.findOne({category:{$ne:"Furniture"}})
< {
  _id: ObjectId('687a307a60c5f36e4689eadc'),
  product_id: 101,
  name: 'Laptop',
  category: 'Electronics',
  price: 55000,
  stock: 10
}
```