

Day-31-Task MongoDB-1

use Products(to create the dataBase)

```
db.products.insertMany([[
  {
    "id": "1",
    "product_name": "Intelligent Fresh Chips",
    "product_price": 655.00,
    "product_material": "Concrete",
    "product_color": "mint green"
  },
  {
    "id": "2",
    "product_name": "Practical Fresh Sausages",
    "product_price": 911.0,
    "product_material": "Cotton",
    "product_color": "indigo"
  },
  {
    "id": "3",
    "product_name": "Refined Steel Car",
    "product_price": 690.00,
    "product_material": "Rubber",
    "product_color": "gold"
  },
  {
    "id": "4",
    "product_name": "Gorgeous Plastic Pants",
    "product_price": 492.00,
```

```
"product_material": "Soft",
"product_color": "plum"
},
{
  "id": "5",
  "product_name": "Sleek Cotton Chair",
  "product_price": 33.00,
  "product_material": "Fresh",
  "product_color": "black"
},
{
  "id": "6",
  "product_name": "Awesome Wooden Towels",
  "product_price": 474.00,
  "product_material": "Plastic",
  "product_color": "orange"
},
{
  "id": "7",
  "product_name": "Practical Soft Shoes",
  "product_price": 500.00,
  "product_material": "Rubber",
  "product_color": "pink"
},
{
  "id": "8",
  "product_name": "Incredible Steel Hat",
  "product_price": 78.00,
  "product_material": "Rubber",
  "product_color": "violet"
},
}
```

```
{
  "id": "9",
  "product_name": "Awesome Wooden Ball",
  "product_price": 28.00,
  "product_material": "Soft",
  "product_color": "azure"
},
{
  "id": "10",
  "product_name": "Generic Wooden Pizza",
  "product_price": 84.00,
  "product_material": "Frozen",
  "product_color": "indigo"
},
{
  "id": "11",
  "product_name": "Unbranded Wooden Cheese",
  "product_price": 26.00,
  "product_material": "Soft",
  "product_color": "black"
},
{
  "id": "12",
  "product_name": "Unbranded Plastic Salad",
  "product_price": 89.00,
  "product_material": "Wooden",
  "product_color": "pink"
},
{
  "id": "13",
  "product_name": "Gorgeous Cotton Keyboard",
```

```
"product_price": 37.00,
"product_material": "Concrete",
"product_color": "sky blue"
},
{
  "id": "14",
  "product_name": "Incredible Steel Shirt",
  "product_price": 54.00,
  "product_material": "Metal",
  "product_color": "white"
},
{
  "id": "15",
  "product_name": "Ergonomic Cotton Hat",
  "product_price": 43.00,
  "product_material": "Rubber",
  "product_color": "mint green"
},
{
  "id": "16",
  "product_name": "Small Soft Chair",
  "product_price": 47.00,
  "product_material": "Cotton",
  "product_color": "teal"
},
{
  "id": "17",
  "product_name": "Incredible Metal Car",
  "product_price": 36.00,
  "product_material": "Fresh",
  "product_color": "indigo"
```

```
},  
{  
  "id": "18",  
  "product_name": "Licensed Plastic Bacon",  
  "product_price": 88.00,  
  "product_material": "Steel",  
  "product_color": "yellow"  
},  
{  
  "id": "19",  
  "product_name": "Intelligent Cotton Chips",  
  "product_price": 46.00,  
  "product_material": "Soft",  
  "product_color": "azure"  
},  
{  
  "id": "20",  
  "product_name": "Handcrafted Wooden Bacon",  
  "product_price": 36.00,  
  "product_material": "Concrete",  
  "product_color": "lime"  
},  
{  
  "id": "21",  
  "product_name": "Unbranded Granite Chicken",  
  "product_price": 90.00,  
  "product_material": "Metal",  
  "product_color": "gold"  
},  
{  
  "id": "22",
```

```
"product_name": "Ergonomic Soft Hat",
"product_price": 99.00,
"product_material": "Rubber",
"product_color": "black"
},
{
  "id": "23",
  "product_name": "Intelligent Steel Pizza",
  "product_price": 95.00,
  "product_material": "Cotton",
  "product_color": "azure"
},
{
  "id": "24",
  "product_name": "Tasty Rubber Cheese",
  "product_price": 47.00,
  "product_material": "Frozen",
  "product_color": "orchid"
},
{
  "id": "25",
  "product_name": "Licensed Steel Car",
  "product_price": 20.00,
  "product_material": "Cotton",
  "product_color": "indigo"
}
])
```

1) Find all the information about each products

query: db.products.find()

explanation: returns all the the information in the collection

```
> db.products.find()
< { _id: ObjectId("63329b35152246fe6d5525d1"),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green' }
{ _id: ObjectId("63329b35152246fe6d5525d2"),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo' }
{ _id: ObjectId("63329b35152246fe6d5525d3"),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold' }
{ _id: ObjectId("63329b35152246fe6d5525d4"),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum' }
{ _id: ObjectId("63329b35152246fe6d5525d5"),
  id: '5',
```

2)Find the product price which are between 400 to 800

query:db.products.find({"product_price":{"\$gte:400,\$lte:800}})

explanation:returns the objects between price range of 400 and 800

```
> db.products.find( {"product_price": {$gte: 400, $lte: 800}})
< { _id: ObjectId("63329b35152246fe6d5525d1"),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green' }
{ _id: ObjectId("63329b35152246fe6d5525d3"),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold' }
{ _id: ObjectId("63329b35152246fe6d5525d4"),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum' }
{ _id: ObjectId("63329b35152246fe6d5525d6"),
  id: '6',
  product_name: 'Awesome Wooden Towels',
  product_price: 474,
  product_material: 'Plastic',
  product_color: 'orange' }
{ _id: ObjectId("63329b35152246fe6d5525d7"),
```


3) Find the product price which are not between 400 to 600

query: `db.products.find({$or:[{"product_price":{$lte:400}},{"product_price":{$gte:600}}])`

explanation: returns the objects between price not in range of 400 and 600

```
db.products.find({$or:[{"product_price":{$lte:400}},{"product_price":{$gte:600}}])
{ _id: ObjectId("63329b35152246fe6d5525d1"),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green' }
{ _id: ObjectId("63329b35152246fe6d5525d2"),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo' }
{ _id: ObjectId("63329b35152246fe6d5525d3"),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold' }
{ _id: ObjectId("63329b35152246fe6d5525d5"),
  id: '5',
  product_name: 'Sleek Cotton Chair',
  product_price: 33,
  product_material: 'Fresh',
  product_color: 'black' }
{ _id: ObjectId("63329b35152246fe6d5525d8"),
```

4)List the four product which are grater than and equal 500 in price

query:db.products.find({"product_price":{\$gte:500}}).limit(4)

explanation:returns the objects four product which are grater than and equal 500 in price

```
> db.products.find({"product_price":{$gte:500}}).limit(4)
< { _id: ObjectId("63329b35152246fe6d5525d1"),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green' }
{ _id: ObjectId("63329b35152246fe6d5525d2"),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo' }
{ _id: ObjectId("63329b35152246fe6d5525d3"),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold' }
{ _id: ObjectId("63329b35152246fe6d5525d7"),
  id: '7',
  product_name: 'Practical Soft Shoes',
  product_price: 500,
  product_material: 'Rubber',
  product_color: 'pink' }
task1>
```

5) Find the product name and product material of each product

query: `db.products.find({}, {"product_name": 1, "product_material": 1, "_id": 0})`

explanation: returns only name and price fields

```
> db.products.find({}, {"product_name": 1, "product_material": 1, "_id": 0})
< { product_name: 'Intelligent Fresh Chips',
  product_material: 'Concrete' }
  { product_name: 'Practical Fresh Sausages',
  product_material: 'Cotton' }
  { product_name: 'Refined Steel Car',
  product_material: 'Rubber' }
  { product_name: 'Gorgeous Plastic Pants',
  product_material: 'Soft' }
  { product_name: 'Sleek Cotton Chair',
  product_material: 'Fresh' }
  { product_name: 'Awesome Wooden Towels',
  product_material: 'Plastic' }
  { product_name: 'Practical Soft Shoes',
  product_material: 'Rubber' }
  { product_name: 'Incredible Steel Hat',
  product_material: 'Rubber' }
  { product_name: 'Awesome Wooden Ball',
  product_material: 'Soft' }
  { product_name: 'Generic Wooden Pizza',
  product_material: 'Frozen' }
  { product_name: 'Unbranded Wooden Cheese',
  product_material: 'Soft' }
  { product_name: 'Unbranded Plastic Salad',
  product_material: 'Wooden' }
```

6) Find the product with a row id of 10

query: `db.products.findOne({id: '10'})`

explanation: returns only one object with row id 10

```
> db.products.findOne({id: '10'})
< { _id: ObjectId("63329b35152246fe6d5525da"),
  id: '10',
  product_name: 'Generic Wooden Pizza',
  product_price: 84,
  product_material: 'Frozen',
  product_color: 'indigo' }

task1 >
```

7) Find only the product name and product material

query: `query=db.products.find({},{"product_name": 1, "product_material": 1, "_id":1})`

explanation: returns only name and price fields

```
> db.products.find({}, {"product_name": 1, "product_material": 1, "_id": 1})
< { _id: ObjectId("63329b35152246fe6d5525d1"),
  product_name: 'Intelligent Fresh Chips',
  product_material: 'Concrete' }
{ _id: ObjectId("63329b35152246fe6d5525d2"),
  product_name: 'Practical Fresh Sausages',
  product_material: 'Cotton' }
{ _id: ObjectId("63329b35152246fe6d5525d3"),
  product_name: 'Refined Steel Car',
  product_material: 'Rubber' }
{ _id: ObjectId("63329b35152246fe6d5525d4"),
  product_name: 'Gorgeous Plastic Pants',
  product_material: 'Soft' }
{ _id: ObjectId("63329b35152246fe6d5525d5"),
  product_name: 'Sleek Cotton Chair',
  product_material: 'Fresh' }
{ _id: ObjectId("63329b35152246fe6d5525d6"),
  product_name: 'Awesome Wooden Towels',
  product_material: 'Plastic' }
{ _id: ObjectId("63329b35152246fe6d5525d7"),
  product_name: 'Practical Soft Shoes',
  product_material: 'Rubber' }
{ _id: ObjectId("63329b35152246fe6d5525d8"),
  product_name: 'Incredible Steel Hat',
  product_material: 'Rubber' }
{ _id: ObjectId("63329b35152246fe6d5525d9"),
  product_name: 'Awesome Wooden Ball',
  product_material: 'Rubber' }
```

8) Find all products which contain the value of soft in product material

query: `db.products.find({"product_material": "Soft"})`

explanation: returns only object which has value of soft in product material

```
<
> db.products.find({"product_material": 'Soft'})
< { _id: ObjectId("63329b35152246fe6d5525d4"),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum' }
{ _id: ObjectId("63329b35152246fe6d5525d9"),
  id: '9',
  product_name: 'Awesome Wooden Ball',
  product_price: 28,
  product_material: 'Soft',
  product_color: 'azure' }
{ _id: ObjectId("63329b35152246fe6d5525db"),
  id: '11',
  product_name: 'Unbranded Wooden Cheese',
  product_price: 26,
  product_material: 'Soft',
  product_color: 'black' }
{ _id: ObjectId("63329b35152246fe6d5525e3"),
  id: '19',
  product_name: 'Intelligent Cotton Chips',
  product_price: 46,
  product_material: 'Soft',
  product_color: 'azure' }
task1 >
```

9) Find products which contain product color indigo and product price 20

query: `db.products.find({$and:[{"product_color":"indigo"}, {"product_price":{$eq:20}}])`

explanation: return only one product

```
product_color: 'indigo' }
> db.products.find({$and:[{"product_color":"indigo"}, {"product_price":{$eq:20}}]})
< { _id: ObjectId("63329b35152246fe6d5525e9"),
  id: '25',
  product_name: 'Licensed Steel Car',
  product_price: 20,
  product_material: 'Cotton',
  product_color: 'indigo' }
```

10) Delete the products which product price value are same

```
query: db.products.aggregate([{$group:{_id:"$product_price",count: {$sum:
1}}},{$match:{count:{"$gt":1}}]})
```

```
db.products.remove({"product_price":36})
```

```
db.products.remove({"product_price":47})
```

```
> db.products.aggregate([{$group:{_id:"$product_price",count: {$sum: 1}}},{$match:{count:{"$gt":1}}]})
< { _id: 47, count: 2 }
  { _id: 36, count: 2 }
```

```
> db.products.remove({"product_price":36})
< { acknowledged: true, deletedCount: 2 }
task1> |
```

```
> db.products.remove({"product_price":47})
< { acknowledged: true, deletedCount: 2 }
task1> |
```