

## DATABASE-MONGODB-TASK-03

### MongoDB queries

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#### 1. Find all the information about each products:

Ans: Query - **dp.products.find()**;

Output : All documents from id:1 to id:24 will be displayed

```
{
  _id:ObjectId('65e02f438054005bdc6b555e'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  id:ObjectId('65e02f438054005bdc6b555f'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
....
{
  _id:ObjectId('65e02f438054005bdc6b5575'),
  id: '24',
  product_name: 'Tasty Rubber Cheese',
  product_price: 47,
  product_material: 'Frozen',
  product_color: 'orchid'
}
```

#### 2. Find the product price which are between 400 to 800:

Ans: Query-**db.products.find({"product\_price":{\$gt:400,\$lt:800}});**

Output: Only 4 documents are shown.

```
{
  _id: ObjectId('65e02f438054005bdc6b555e'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('65e02f438054005bdc6b5560'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
{
  _id: ObjectId('65e02f438054005bdc6b5561'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5563'),
  id: '6',
  product_name: 'Awesome Wooden Towels',
  product_price: 474,
  product_material: 'Plastic',
  product_color: 'orange'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5564'),
  id: '7',
  product_name: 'Practical Soft Shoes',
  product_price: 500,
  product_material: 'Rubber',
  product_color: 'pink'
}
```

### 3. Find the product price which are not between 400 to 600:

Ans: Query- **db.products.find({ "product\_price": { \$not: { \$gte: 400, \$lte: 600 } } });**

Query output: Only 22 documents are displayed

```
{
  _id: ObjectId('65e02f438054005bdc6b555e'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b555f'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5560'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5562'),
  id: '5',
  product_name: 'Sleek Cotton Chair',
  product_price: 33,
  product_material: 'Fresh',
  product_color: 'black'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5565'),
  id: '8',
  product_name: 'Incredible Steel Hat',
  product_price: 78,
  product_material: 'Rubber',
  product_color: 'violet'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5566'),
  id: '9',
  product_name: 'Awesome Wooden Ball',
  product_price: 28,
  product_material: 'Soft',
  product_color: 'azure'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5567'),
  id: '10',
  product_name: 'Generic Wooden Pizza',
  product_price: 84,
  product_material: 'Frozen',
  product_color: 'indigo'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b556a'),
  id: '13',
  product_name: 'Gorgeous Cotton Keyboard',
  product_price: 37,
  product_material: 'Concrete',
  product_color: 'sky blue'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b556d'),
  id: '16',
  product_name: 'Small Soft Chair',
  product_price: 47,
  product_material: 'Cotton',
  product_color: 'teal'
}
```

```
{
  _id:
    ObjectId('65e02f438054005bdc6b5568'),
  id: '11',
  product_name: 'Unbranded Wooden Cheese',
  product_price: 26,
  product_material: 'Soft',
  product_color: 'black'
}
```

```
{
  _id:
    ObjectId('65e02f438054005bdc6b556b'),
  id: '14',
  product_name: 'Incredible Steel Shirt',
  product_price: 54,
  product_material: 'Metal',
  product_color: 'white'
}
```

```
{
  _id:
    ObjectId('65e02f438054005bdc6b556e'),
  id: '17',
  product_name: 'Incredible Metal Car',
  product_price: 36,
  product_material: 'Fresh',
  product_color: 'indigo'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5569'),
  id: '12',
  product_name: 'Unbranded Plastic Salad',
  product_price: 89,
  product_material: 'Wooden',
  product_color: 'pink'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b556c'),
  id: '15',
  product_name: 'Ergonomic Cotton Hat',
  product_price: 43,
  product_material: 'Rubber',
  product_color: 'mint green'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b556f'),
  id: '18',
  product_name: 'Licensed Plastic Bacon',
  product_price: 88,
  product_material: 'Steel',
  product_color: 'yellow'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5570'),
  id: '19',
  product_name: 'Intelligent Cotton Chips',
  product_price: 46,
  product_material: 'Soft',
  product_color: 'azure'
}
```

```
{
  _id:
    ObjectId('65e02f438054005bdc6b5571'),
  id: '20',
  product_name: 'Handcrafted Wooden
  Bacon',
  product_price: 36,
  product_material: 'Concrete',
  product_color: 'lime'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5572'),
  id: '21',
  product_name: 'Unbranded Granite Chicken',
  product_price: 90,
  product_material: 'Metal',
  product_color: 'gold'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5573'),
  id: '22',
  product_name: 'Ergonomic Soft Hat',
  product_price: 99,
  product_material: 'Rubber',
  product_color: 'black'
}
```

```
{
  _id:
    ObjectId('65e02f438054005bdc6b5574'),
  id: '23',
  product_name: 'Intelligent Steel Pizza',
  product_price: 95,
  product_material: 'Cotton',
  product_color: 'azure'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5575'),
  id: '24',
  product_name: 'Tasty Rubber Cheese',
  product_price: 47,
  product_material: 'Frozen',
  product_color: 'orchid'
}
```

```
{
  _id: ObjectId('65e02f438054005bdc6b5576'),
  id: '25',
  product_name: 'Licensed Steel Car',
  product_price: 20,
  product_material: 'Cotton',
  product_color: 'indigo'
}
```

#### 4. List the four product which are greater than 500 in price:

Ans: Query- **db.products.find({ "product\_price": { \$gt: 500 } }).limit(4);**

Query output: Only 3 documents were displayed.

```
{
  _id: ObjectId('65e02f438054005bdc6b555e'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('65e02f438054005bdc6b555f'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('65e02f438054005bdc6b5560'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
```

### 5. Find the product name and product material of each products:

Ans: Query - **db.products.find( { "product\_name": 1, "product\_material": 1 } );**

Query output: All documents default id, product name, product object are shown below

```
{
  _id: ObjectId('65e21267e020ef8fe26c7038'),
  product_name: 'Intelligent Fresh Chips',
  product_material: 'Concrete'
}
```

### 6. Find the product with a row id of 10:

Ans: Query - **db.products.find( { "id": 10 } );**

Query output: Only Document id will be displayed: 10 details.

```
{
  _id: ObjectId('65e02f438054005bdc6b5567'),
  id: '10',
  product_name: 'Generic Wooden Pizza',
  product_price: 84,
  product_material: 'Frozen',
  product_color: 'indigo'
}
```

### 7. Find only the product name and product material:

Ans: Query - **db.products.find({}, { "product\_name": 1, "product\_material": 1, "\_id": 0 });**

Query output: All documents with product name and product items will be displayed as below without default id.

```
{
  product_name: 'Intelligent Fresh Chips',
  product_material: 'Concrete'
}
```

### 8. Find all products which contain the value of soft in product material:

Ans: Query - **db.products.find({ "product\_material": "soft" });**

Query output: Only soft product material documents are displayed

```
{
  _id: ObjectId('65e02f438054005bdc6b5561'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum'
}

{
  _id: ObjectId('65e02f438054005bdc6b5566'),
  id: '9',
  product_name: 'Awesome Wooden Ball',
  product_price: 28,
  product_material: 'Soft',
  product_color: 'azure'
}

{
  _id: ObjectId('65e02f438054005bdc6b5568'),
  id: '11',
  product_name: 'Unbranded Wooden Cheese',
  product_price: 26,
  product_material: 'Soft',
  product_color: 'black'
}

{
  _id: ObjectId('65e02f438054005bdc6b5570'),
  id: '19',
  product_name: 'Intelligent Cotton Chips',
  product_price: 46,
  product_material: 'Soft',
  product_color: 'azure'
}
```

### 9. Find products which contain product color indigo and product price 492.00:

Ans: Query - **db.products.find({\$or: [{ "product\_color": "indigo" }, { "product\_price": 492.00 }]});**

Query output: use or operator- Product color indigo documents and product price 492 only displayed.

|  |   |   |
|--|---|---|
| <pre>{   _id: ObjectId('65e02f438054005bdc6b555f'),   "id": "2",   "product_name": "Practical Fresh Sausages",   "product_price": 911.0,   "product_material": "Cotton",   "product_color": "indigo" }</pre> | <pre>{   _id: ObjectId('65e02f438054005bdc6b5561'),   "id": "4",   "product_name": "Gorgeous Plastic Pants",   "product_price": 492.00,   "product_material": "Soft",   "product_color": "plum" }</pre> | <pre>{   _id: ObjectId('65e02f438054005bdc6b5567'),   "id": "10",   "product_name": "Generic Wooden Pizza",   "product_price": 84.00,   "product_material": "Frozen",   "product_color": "indigo" }</pre> |
| <pre>{   _id: ObjectId('65e02f438054005bdc6b556e'),   "id": "17",   "product_name": "Incredible Metal Car",   "product_price": 36.00,   "product_material": "Fresh",   "product_color": "indigo" }</pre>     | <pre>{   _id: ObjectId('65e02f438054005bdc6b5576'),   "id": "25",   "product_name": "Licensed Steel Car",   "product_price": 20.00,   "product_material": "Cotton",   "product_color": "indigo" }</pre> |   |

### 10. Delete the products which product price value are same:

Ans: Query - **db.products.aggregate([{\$group: { \_id: "\$product\_price", count: { \$sum: 1 } }}, {\$match: { count: { \$gt: 1 }}}]).forEach(function (pro) { db.products.deleteMany({ product\_price: pro.\_id });});**

Query output: Only documents that do not have same price values are displayed

db.products.countDocuments();21 => There are 21 remaining documents in the products collection.