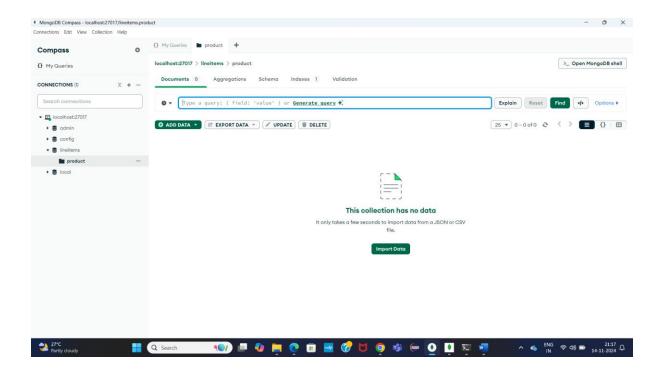
MongoDB



lineitems> show collections

lineitems> db.product.insertMany([

product

```
... {
... "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"
... }
)...]
{
 acknowledged: true,
 insertedIds: {
  '0': ObjectId('673619b1b09b0453280d8190'),
  '1': ObjectId('673619b1b09b0453280d8191'),
  '2': ObjectId('673619b1b09b0453280d8192'),
  '3': ObjectId('673619b1b09b0453280d8193'),
  '4': ObjectId('673619b1b09b0453280d8194'),
  '5': ObjectId('673619b1b09b0453280d8195'),
  '6': ObjectId('673619b1b09b0453280d8196'),
  '7': ObjectId('673619b1b09b0453280d8197'),
  '8': ObjectId('673619b1b09b0453280d8198'),
  '9': ObjectId('673619b1b09b0453280d8199'),
  '10': ObjectId('673619b1b09b0453280d819a'),
  '11': ObjectId('673619b1b09b0453280d819b'),
  '12': ObjectId('673619b1b09b0453280d819c'),
  '13': ObjectId('673619b1b09b0453280d819d'),
  '14': ObjectId('673619b1b09b0453280d819e'),
  '15': ObjectId('673619b1b09b0453280d819f'),
  '16': ObjectId('673619b1b09b0453280d81a0'),
  '17': ObjectId('673619b1b09b0453280d81a1'),
  '18': ObjectId('673619b1b09b0453280d81a2'),
  '19': ObjectId('673619b1b09b0453280d81a3'),
```

```
'20': ObjectId('673619b1b09b0453280d81a4'),

'21': ObjectId('673619b1b09b0453280d81a5'),

'22': ObjectId('673619b1b09b0453280d81a6'),

'23': ObjectId('673619b1b09b0453280d81a7'),

'24': ObjectId('673619b1b09b0453280d81a8')

}

lineitems>
```

MongoDB Queries:

1. Find all the information about each products

```
lineitems> db.product.find()
  _id: ObjectId('673619b1b09b0453280d8190'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
 },
 {
  _id: ObjectId('673619b1b09b0453280d8191'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
 },
  _id: ObjectId('673619b1b09b0453280d8192'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
 },
  _id: ObjectId('673619b1b09b0453280d8193'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
```

```
product_price: 492,
 product material: 'Soft',
 product_color: 'plum'
},
 _id: ObjectId('673619b1b09b0453280d8194'),
 id: '5',
 product_name: 'Sleek Cotton Chair',
 product_price: 33,
 product_material: 'Fresh',
 product_color: 'black'
},
{
 _id: ObjectId('673619b1b09b0453280d8195'),
 id: '6',
 product_name: 'Awesome Wooden Towels',
 product_price: 474,
 product_material: 'Plastic',
 product_color: 'orange'
},
{
 _id: ObjectId('673619b1b09b0453280d8196'),
 id: '7',
 product_name: 'Practical Soft Shoes',
 product_price: 500,
 product_material: 'Rubber',
 product_color: 'pink'
},
{
 _id: ObjectId('673619b1b09b0453280d8197'),
 id: '8',
 product_name: 'Incredible Steel Hat',
 product_price: 78,
 product_material: 'Rubber',
 product_color: 'violet'
},
 _id: ObjectId('673619b1b09b0453280d8198'),
 id: '9',
 product_name: 'Awesome Wooden Ball',
 product_price: 28,
 product material: 'Soft',
 product_color: 'azure'
},
 _id: ObjectId('673619b1b09b0453280d8199'),
 id: '10',
 product name: 'Generic Wooden Pizza',
```

```
product_price: 84,
 product material: 'Frozen',
 product_color: 'indigo'
},
 _id: ObjectId('673619b1b09b0453280d819a'),
 id: '11',
 product_name: 'Unbranded Wooden Cheese',
 product_price: 26,
 product_material: 'Soft',
 product_color: 'black'
},
{
 _id: ObjectId('673619b1b09b0453280d819b'),
 id: '12',
 product_name: 'Unbranded Plastic Salad',
 product_price: 89,
 product_material: 'Wooden',
 product_color: 'pink'
},
{
 _id: ObjectId('673619b1b09b0453280d819c'),
 id: '13',
 product_name: 'Gorgeous Cotton Keyboard',
 product_price: 37,
 product_material: 'Concrete',
 product_color: 'sky blue'
},
{
 _id: ObjectId('673619b1b09b0453280d819d'),
 id: '14',
 product_name: 'Incredible Steel Shirt',
 product_price: 54,
 product_material: 'Metal',
 product_color: 'white'
},
 _id: ObjectId('673619b1b09b0453280d819e'),
 id: '15',
 product_name: 'Ergonomic Cotton Hat',
 product_price: 43,
 product material: 'Rubber',
 product_color: 'mint green'
},
 _id: ObjectId('673619b1b09b0453280d819f'),
 id: '16',
 product_name: 'Small Soft Chair',
```

```
product_price: 47,
  product_material: 'Cotton',
  product_color: 'teal'
 },
  _id: ObjectId('673619b1b09b0453280d81a0'),
  id: '17',
  product_name: 'Incredible Metal Car',
  product_price: 36,
  product_material: 'Fresh',
  product_color: 'indigo'
 },
 {
  _id: ObjectId('673619b1b09b0453280d81a1'),
  id: '18',
  product_name: 'Licensed Plastic Bacon',
  product_price: 88,
  product_material: 'Steel',
  product_color: 'yellow'
 },
 {
  _id: ObjectId('673619b1b09b0453280d81a2'),
  id: '19',
  product_name: 'Intelligent Cotton Chips',
  product_price: 46,
  product_material: 'Soft',
  product_color: 'azure'
 },
 {
  _id: ObjectId('673619b1b09b0453280d81a3'),
  id: '20',
  product_name: 'Handcrafted Wooden Bacon',
  product_price: 36,
  product_material: 'Concrete',
  product_color: 'lime'
 }
Type "it" for more
lineitems> it
  _id: ObjectId('673619b1b09b0453280d81a4'),
  id: '21',
  product_name: 'Unbranded Granite Chicken',
  product_price: 90,
  product_material: 'Metal',
  product_color: 'gold'
 },
```

```
{
  id: ObjectId('673619b1b09b0453280d81a5'),
  id: '22',
  product_name: 'Ergonomic Soft Hat',
  product price: 99,
  product_material: 'Rubber',
  product_color: 'black'
 },
  _id: ObjectId('673619b1b09b0453280d81a6'),
  id: '23',
  product_name: 'Intelligent Steel Pizza',
  product_price: 95,
  product_material: 'Cotton',
  product_color: 'azure'
 },
  _id: ObjectId('673619b1b09b0453280d81a7'),
  id: '24',
  product_name: 'Tasty Rubber Cheese',
  product_price: 47,
  product_material: 'Frozen',
  product_color: 'orchid'
 },
  _id: ObjectId('673619b1b09b0453280d81a8'),
  id: '25',
  product_name: 'Licensed Steel Car',
  product_price: 20,
  product material: 'Cotton',
  product_color: 'indigo'
 }
]
lineitems>
```

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

```
_id: ObjectId('673619b1b09b0453280d8192'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product material: 'Rubber',
  product_color: 'gold'
 },
  _id: ObjectId('673619b1b09b0453280d8193'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum'
 },
  _id: ObjectId('673619b1b09b0453280d8195'),
  id: '6',
  product_name: 'Awesome Wooden Towels',
  product_price: 474,
  product_material: 'Plastic',
  product_color: 'orange'
 },
 {
  _id: ObjectId('673619b1b09b0453280d8196'),
  id: '7',
  product_name: 'Practical Soft Shoes',
  product_price: 500,
  product_material: 'Rubber',
  product color: 'pink'
 }
lineitems>
```

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

```
_id: ObjectId('673619b1b09b0453280d8191'),
 id: '2',
 product_name: 'Practical Fresh Sausages',
 product_price: 911,
 product material: 'Cotton',
 product_color: 'indigo'
},
 _id: ObjectId('673619b1b09b0453280d8192'),
 id: '3',
 product_name: 'Refined Steel Car',
 product_price: 690,
 product_material: 'Rubber',
 product_color: 'gold'
},
 _id: ObjectId('673619b1b09b0453280d8194'),
 id: '5',
 product_name: 'Sleek Cotton Chair',
 product_price: 33,
 product_material: 'Fresh',
 product_color: 'black'
},
{
 _id: ObjectId('673619b1b09b0453280d8197'),
 id: '8',
 product_name: 'Incredible Steel Hat',
 product_price: 78,
 product_material: 'Rubber',
 product color: 'violet'
},
 _id: ObjectId('673619b1b09b0453280d8198'),
 id: '9',
 product_name: 'Awesome Wooden Ball',
 product_price: 28,
 product_material: 'Soft',
 product_color: 'azure'
},
 _id: ObjectId('673619b1b09b0453280d8199'),
 id: '10',
 product_name: 'Generic Wooden Pizza',
 product_price: 84,
 product_material: 'Frozen',
 product_color: 'indigo'
},
{
```

```
_id: ObjectId('673619b1b09b0453280d819a'),
 id: '11',
 product_name: 'Unbranded Wooden Cheese',
 product_price: 26,
 product material: 'Soft',
 product_color: 'black'
},
 _id: ObjectId('673619b1b09b0453280d819b'),
 id: '12',
 product_name: 'Unbranded Plastic Salad',
 product_price: 89,
 product_material: 'Wooden',
 product_color: 'pink'
},
 _id: ObjectId('673619b1b09b0453280d819c'),
 id: '13',
 product_name: 'Gorgeous Cotton Keyboard',
 product_price: 37,
 product_material: 'Concrete',
 product_color: 'sky blue'
},
{
 _id: ObjectId('673619b1b09b0453280d819d'),
 id: '14',
 product_name: 'Incredible Steel Shirt',
 product_price: 54,
 product_material: 'Metal',
 product color: 'white'
},
 _id: ObjectId('673619b1b09b0453280d819e'),
 id: '15',
 product_name: 'Ergonomic Cotton Hat',
 product_price: 43,
 product_material: 'Rubber',
 product_color: 'mint green'
},
 _id: ObjectId('673619b1b09b0453280d819f'),
 id: '16',
 product_name: 'Small Soft Chair',
 product_price: 47,
 product_material: 'Cotton',
 product_color: 'teal'
},
{
```

```
_id: ObjectId('673619b1b09b0453280d81a0'),
 id: '17',
 product_name: 'Incredible Metal Car',
 product_price: 36,
 product material: 'Fresh',
 product_color: 'indigo'
},
 _id: ObjectId('673619b1b09b0453280d81a1'),
 id: '18',
 product_name: 'Licensed Plastic Bacon',
 product_price: 88,
 product_material: 'Steel',
 product_color: 'yellow'
},
 _id: ObjectId('673619b1b09b0453280d81a2'),
 id: '19',
 product_name: 'Intelligent Cotton Chips',
 product_price: 46,
 product_material: 'Soft',
 product_color: 'azure'
},
{
 _id: ObjectId('673619b1b09b0453280d81a3'),
 id: '20',
 product_name: 'Handcrafted Wooden Bacon',
 product_price: 36,
 product_material: 'Concrete',
 product_color: 'lime'
},
 _id: ObjectId('673619b1b09b0453280d81a4'),
 id: '21',
 product_name: 'Unbranded Granite Chicken',
 product_price: 90,
 product_material: 'Metal',
 product_color: 'gold'
},
 _id: ObjectId('673619b1b09b0453280d81a5'),
 id: '22',
 product_name: 'Ergonomic Soft Hat',
 product_price: 99,
 product_material: 'Rubber',
 product_color: 'black'
},
{
```

```
_id: ObjectId('673619b1b09b0453280d81a6'),
  id: '23',
  product_name: 'Intelligent Steel Pizza',
  product_price: 95,
  product material: 'Cotton',
  product_color: 'azure'
 }
Type "it" for more
lineitems> it
 {
  _id: ObjectId('673619b1b09b0453280d81a7'),
  id: '24',
  product_name: 'Tasty Rubber Cheese',
  product_price: 47,
  product_material: 'Frozen',
  product_color: 'orchid'
 },
  _id: ObjectId('673619b1b09b0453280d81a8'),
  id: '25',
  product_name: 'Licensed Steel Car',
  product_price: 20,
  product_material: 'Cotton',
  product_color: 'indigo'
 }
lineitems>
```

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

```
product_material: 'Cotton',
  product_color: 'indigo'
},
{
  _id: ObjectId('673619b1b09b0453280d8192'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
]
lineitems>
```

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

```
lineitems> db.product.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'
 },
  product name: 'Gorgeous Cotton Keyboard',
  product_material: 'Concrete'
 },
 { product name: 'Incredible Steel Shirt', product material: 'Metal' },
```

```
{ product_name: 'Ergonomic Cotton Hat', product_material: 'Rubber' },
 { product_name: 'Small Soft Chair', product_material: 'Cotton' },
 { product_name: 'Incredible Metal Car', product_material: 'Fresh' },
 { product_name: 'Licensed Plastic Bacon', product_material: 'Steel' },
  product name: 'Intelligent Cotton Chips',
  product_material: 'Soft'
 },
  product_name: 'Handcrafted Wooden Bacon',
  product_material: 'Concrete'
Type "it" for more
lineitems> it
  product name: 'Unbranded Granite Chicken',
  product_material: 'Metal'
 { product_name: 'Ergonomic Soft Hat', product_material: 'Rubber' },
  product_name: 'Intelligent Steel Pizza',
  product_material: 'Cotton'
 },
 { product_name: 'Tasty Rubber Cheese', product_material: 'Frozen' },
 { product_name: 'Licensed Steel Car', product_material: 'Cotton' }
lineitems>
```

6. Find the product with a row id of 10

```
lineitems> db.product.find().skip(9).limit(1)
[
    {
        _id: ObjectId('673619b1b09b0453280d819a'),
        id: '11',
        product_name: 'Unbranded Wooden Cheese',
        product_price: 26,
        product_material: 'Soft',
        product_color: 'black'
    }
]
lineitems>
```

7. Find only the product name and product material

```
lineitems> db.product.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'
 },
  product_name: 'Gorgeous Cotton Keyboard',
  product material: 'Concrete'
 },
 { product_name: 'Incredible Steel Shirt', product_material: 'Metal' },
 { product name: 'Ergonomic Cotton Hat', product material: 'Rubber' },
 { product_name: 'Small Soft Chair', product_material: 'Cotton' },
 { product name: 'Incredible Metal Car', product material: 'Fresh' },
 { product name: 'Licensed Plastic Bacon', product material: 'Steel' },
  product_name: 'Intelligent Cotton Chips',
  product material: 'Soft'
 },
  product name: 'Handcrafted Wooden Bacon',
  product_material: 'Concrete'
 }
Type "it" for more
lineitems> it
```

```
{
  product_name: 'Unbranded Granite Chicken',
  product_material: 'Metal'
},
{ product_name: 'Ergonomic Soft Hat', product_material: 'Rubber' },
{
  product_name: 'Intelligent Steel Pizza',
  product_material: 'Cotton'
},
{ product_name: 'Tasty Rubber Cheese', product_material: 'Frozen' },
{ product_name: 'Licensed Steel Car', product_material: 'Cotton' }
]
lineitems>
```

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

```
lineitems> db.product.find({ product_material: { $regex: "soft", $options: "i" } })
[
 {
  _id: ObjectId('673619b1b09b0453280d8193'),
  id: '4',
  product name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum'
 },
  _id: ObjectId('673619b1b09b0453280d8198'),
  id: '9',
  product_name: 'Awesome Wooden Ball',
  product_price: 28,
  product_material: 'Soft',
  product_color: 'azure'
 },
  _id: ObjectId('673619b1b09b0453280d819a'),
  id: '11',
  product_name: 'Unbranded Wooden Cheese',
  product_price: 26,
  product material: 'Soft',
  product_color: 'black'
 },
  _id: ObjectId('673619b1b09b0453280d81a2'),
  id: '19',
  product name: 'Intelligent Cotton Chips',
```

```
product_price: 46,
product_material: 'Soft',
product_color: 'azure'
}
]
lineitems>
```

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

```
lineitems> db.product.find({ $and: [ { product_color: "indigo" }, { product_price: 492.00 }] })
lineitems>
```

10. Delete the products which product price value are 28

```
lineitems> db.product.deleteMany({ product_price: 28 })
{ acknowledged: true, deletedCount: 1 }
lineitems>
```