CASE STUDY 1

1. Find all the information about each products

```
> use casestudy
< switched to db casestudy
db["products"].find()
<{
    _id: ObjectId('6880b8b041b48e0c4b2ed590'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed591'),
    id: '2',
    product_name: 'Practical Fresh Sausages',
    product_price: 911,
    product_material: 'Cotton',
    product_color: 'indigo'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed592'),
    id: '3',
    product_name: 'Refined Steel Car',
    product_price: 690,
    product_material: 'Rubber',
    product_color: 'gold'
}
</pre>
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed593'),
    id: '4',
    product_name: 'Gorgeous Plastic Pants',
    product_price: 492,
    product_material: 'Soft',
    product_color: 'plum'
}
{
    _id: ObjectId('6880b8b041b48e0c4b2ed594'),
    id: '5',
    product_name: 'Sleek Cotton Chair',
    product_price: 33,
    product_material: 'Fresh',
    product_color: 'black'
}
{
    _id: ObjectId('6880b8b041b48e0c4b2ed595'),
    id: '6',
    product_name: 'Awesome Wooden Towels',
    product_price: 474,
    product_material: 'Plastic',
    product_color: 'orange'
}
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed596'),
    id: '7',
    product_name: 'Practical Soft Shoes',
    product_price: 500,
    product_material: 'Rubber',
    product_color: 'pink'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed597'),
    id: '8',
    product_name: 'Incredible Steel Hat',
    product_price: 78,
    product_material: 'Rubber',
    product_color: 'violet'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed598'),
    id: '9',
    product_name: 'Awesome Wooden Ball',
    product_price: 28,
    product_material: 'Soft',
    product_color: 'azure'
}
```

```
_id: ObjectId('6880b8b041b48e0c4b2ed599'),
id: '10',
product_name: 'Generic Wooden Pizza',
product_price: 84,
product_color: 'indigo'
_id: ObjectId('6880b8b041b48e0c4b2ed59a'),
id: '11',
product_name: 'Unbranded Wooden Cheese',
product_price: 26,
product_material: 'Soft',
product_color: 'black'
_id: ObjectId('6880b8b041b48e0c4b2ed59b'),
id: '12',
product_name: 'Unbranded Plastic Salad',
product_price: 89,
product_material: 'Wooden',
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed59c'),
    id: '13',
    product_name: 'Gorgeous Cotton Keyboard',
    product_price: 37,
    product_material: 'Concrete',
    product_color: 'sky blue'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed59d'),
    id: '14',
    product_name: 'Incredible Steel Shirt',
    product_price: 54,
    product_material: 'Metal',
    product_color: 'white'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed59e'),
    id: '15',
    product_name: 'Ergonomic Cotton Hat',
    product_price: 43,
    product_material: 'Rubber',
    product_color: 'mint green'
}
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed59f'),
    id: '16',
    product_name: 'Small Soft Chair',
    product_price: 47,
    product_material: 'Cotton',
    product_color: 'teal'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed5a0'),
    id: '17',
    product_name: 'Incredible Metal Car',
    product_price: 36,
    product_material: 'Fresh',
    product_color: 'indigo'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed5a1'),
    id: '18',
    product_name: 'Licensed Plastic Bacon',
    product_price: 88,
    product_material: 'Steel',
    product_color: 'yellow'
}
```

```
< {
   _id: ObjectId('6880b8b041b48e0c4b2ed5a4'),
   id: '21',
   product_name: 'Unbranded Granite Chicken',
   product_price: 90,
   product_material: 'Metal',
   product_color: 'gold'
 }
 {
   _id: ObjectId('6880b8b041b48e0c4b2ed5a5'),
   id: '22',
   product_name: 'Ergonomic Soft Hat',
   product_price: 99,
   product_material: 'Rubber',
   product_color: 'black'
 }
   _id: ObjectId('6880b8b041b48e0c4b2ed5a6'),
   id: '23',
   product_name: 'Intelligent Steel Pizza',
   product_price: 95,
   product_material: 'Cotton',
   product_color: 'azure'
 }
   _id: ObjectId('6880b8b041b48e0c4b2ed5a2'),
   id: '19',
   product_name: 'Intelligent Cotton Chips',
   product_price: 46,
    product_material: 'Soft',
   product_color: 'azure'
 }
    _id: ObjectId('6880b8b041b48e0c4b2ed5a3'),
    id: '20',
    product_name: 'Handcrafted Wooden Bacon',
    product_price: 36,
    product_material: 'Concrete',
    product_color: 'lime'
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed5a7'),
    id: '24',
    product_name: 'Tasty Rubber Cheese',
    product_price: 47,
    product_material: 'Frozen',
    product_color: 'orchid'
}
{
    _id: ObjectId('6880b8b041b48e0c4b2ed5a8'),
    id: '25',
    product_name: 'Licensed Steel Car',
    product_price: 20,
    product_material: 'Cotton',
    product_color: 'indigo'
}
casestudy>
```

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

```
> db["products"].find({ "product_price":{ "$gte": 400, "$lte": 800 }}).sort( { "product_price":1})

<{
    _id: ObjectId('6880b8b041b48e0c4b2ed595'),
    id: '6',
    product_name: 'Awesome Wooden Towels',
    product_price: 474,
    product_color: 'orange'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed593'),
    id: '4',
    product_name: 'Gorgeous Plastic Pants',
    product_material: 'Soft',
    product_material: 'Soft',
    product_color: 'plum'
}

{
    _id: ObjectId('6880b8b041b48e0c4b2ed596'),
    id: '7',
    product_name: 'Practical Soft Shoes',
    product_price: 500,
    product_material: 'Rubber',
    product_color: 'pink'
}</pre>
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed590'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
}
{
    _id: ObjectId('6880b8b041b48e0c4b2ed592'),
    id: '3',
    product_name: 'Refined Steel Car',
    product_price: 690,
    product_material: 'Rubber',
    product_color: 'gold'
}
casestudy>
```

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

```
{
 _id: ObjectId('6880b8b041b48e0c4b2ed594'),
  id: '5',
 product_name: 'Sleek Cotton Chair',
 product_price: 33,
 product_material: 'Fresh',
 product_color: 'black'
}
{
  _id: ObjectId('6880b8b041b48e0c4b2ed5a0'),
  id: '17',
 product_name: 'Incredible Metal Car',
 product_price: 36,
 product_material: 'Fresh',
 product_color: 'indigo'
}
{
  _id: ObjectId('6880b8b041b48e0c4b2ed5a3'),
  id: '20',
 product_name: 'Handcrafted Wooden Bacon',
 product_price: 36,
 product_material: 'Concrete',
 product_color: 'lime'
```

```
_id: ObjectId('6880b8b041b48e0c4b2ed59c'),
  id: '13',
  product_name: 'Gorgeous Cotton Keyboard',
  product_price: 37,
  product_material: 'Concrete',
  product_color: 'sky blue'
}
{
  _id: ObjectId('6880b8b041b48e0c4b2ed59e'),
  id: '15',
  product_name: 'Ergonomic Cotton Hat',
  product_price: 43,
  product_material: 'Rubber',
  product_color: 'mint green'
}
{
  _id: ObjectId('6880b8b041b48e0c4b2ed5a2'),
  id: '19',
  product_name: 'Intelligent Cotton Chips',
  product_price: 46,
  product_material: 'Soft',
  product_color: 'azure'
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed59f'),
    id: '16',
    product_name: 'Small Soft Chair',
    product_price: 47,
    product_material: 'Cotton',
    product_color: 'teal'
}
{
    _id: ObjectId('6880b8b041b48e0c4b2ed5a7'),
    id: '24',
    product_name: 'Tasty Rubber Cheese',
    product_price: 47,
    product_material: 'Frozen',
    product_color: 'orchid'
}
{
    _id: ObjectId('6880b8b041b48e0c4b2ed59d'),
    id: '14',
    product_name: 'Incredible Steel Shirt',
    product_price: 54,
    product_material: 'Metal',
    product_color: 'white'
}
```

```
_id: ObjectId('6880b8b041b48e0c4b2ed597'),
  id: '8',
  product_name: 'Incredible Steel Hat',
  product_price: 78,
  product_material: 'Rubber',
  product_color: 'violet'
{
  _id: ObjectId('6880b8b041b48e0c4b2ed599'),
  id: '10',
  product_name: 'Generic Wooden Pizza',
  product_price: 84,
  product_material: 'Frozen',
  product_color: 'indigo'
}
{
  _id: ObjectId('6880b8b041b48e0c4b2ed5a1'),
  id: '18',
  product_name: 'Licensed Plastic Bacon',
  product_price: 88,
  product_material: 'Steel',
  product_color: 'yellow'
}
```

```
_id: ObjectId('6880b8b041b48e0c4b2ed59b'),
  id: '12',
  product_name: 'Unbranded Plastic Salad',
  product_price: 89,
  product_material: 'Wooden',
  product_color: 'pink'
}
{
  _id: ObjectId('6880b8b041b48e0c4b2ed5a4'),
  id: '21',
  product_name: 'Unbranded Granite Chicken',
  product_price: 90,
  product_material: 'Metal',
  product_color: 'gold'
}
  _id: ObjectId('6880b8b041b48e0c4b2ed5a6'),
  id: '23',
  product_name: 'Intelligent Steel Pizza',
  product_price: 95,
  product_material: 'Cotton',
  product_color: 'azure'
```

```
{
    _id: ObjectId('6880b8b041b48e0c4b2ed5a5'),
    id: '22',
    product_name: 'Ergonomic Soft Hat',
    product_price: 99,
    product_material: 'Rubber',
    product_color: 'black'
}
{
    _id: ObjectId('6880b8b041b48e0c4b2ed590'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
}
Type "it" for more
casestudy>
```

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

```
> db.products.find(
    { "product_price": { "$gt": 500 } }
  ).sort({ "product_price": 1 }).limit(4)
< {
    _id: ObjectId('6880b8b041b48e0c4b2ed590'),
    id: '1',
    product_name: 'Intelligent Fresh Chips',
    product_price: 655,
    product_material: 'Concrete',
    product_color: 'mint green'
  }
  {
    _id: ObjectId('6880b8b041b48e0c4b2ed592'),
    id: '3',
   product_name: 'Refined Steel Car',
    product_price: 690,
    product_material: 'Rubber',
    product_color: 'gold'
 }
  {
    _id: ObjectId('6880b8b041b48e0c4b2ed591'),
    id: '2',
    product_name: 'Practical Fresh Sausages',
    product_price: 911,
    product_material: 'Cotton',
    product_color: 'indigo'
  }
casestudy>
```

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

```
> db["products"].find({}),{"product_name":1,"_id":0,"product_material":1})
< {
    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_mame: 'Sleek Cotton Chair',
    product_material: 'Fresh'
}

{
    product_name: 'Awesome Wooden Towels',
    product_material: 'Plastic'
}</pre>
```

```
{
    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'
}
```

```
    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'

}

casestudy
```

6. Find the product with a row id of 10

```
> db.products.find({ "id": "10" })

< {
    _id: ObjectId('6880b8b041b48e0c4b2ed599'),
    id: '10',
    product_name: 'Generic Wooden Pizza',
    product_price: 84,
    product_material: 'Frozen',
    product_color: 'indigo'
    }

casestudy>
```

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

```
db.products.find({ "product_color": "indigo", "product_price": 492.00 })

casestudy > |
```