

MongoDB Day 1

1) Find all the information about each products?

Ans: `db.products.find().pretty()`

```
> db.products.find().pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e3"),
  "id" : "1",
  "product_name" : "Intelligent Fresh Chips",
  "product_price" : 655,
  "product_material" : "Concrete",
  "product_color" : "mint green"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e4"),
  "id" : "2",
  "product_name" : "Practical Fresh Sausages",
  "product_price" : 911,
  "product_material" : "Cotton",
  "product_color" : "indigo"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e5"),
  "id" : "3",
  "product_name" : "Refined Steel Car",
  "product_price" : 690,
  "product_material" : "Rubber",
  "product_color" : "gold"
}
```

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

Ans: `db.products.find({product_price:{$gt:400,$lt:800}}).pretty()`

```
> db.products.find({product_price:{$gt:400,$lt:800}}).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e3"),
  "id" : "1",
  "product_name" : "Intelligent Fresh Chips",
  "product_price" : 655,
  "product_material" : "Concrete",
  "product_color" : "mint green"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e5"),
  "id" : "3",
  "product_name" : "Refined Steel Car",
  "product_price" : 690,
  "product_material" : "Rubber",
  "product_color" : "gold"
}
```

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

Ans: db.products.find({product_price:{\$not:{\$gte:400,\$lte:600}}}).pretty()

```
> db.products.find({product_price:{$not:{$gte:400,$lte:600}}}).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e3"),
  "id" : "1",
  "product_name" : "Intelligent Fresh Chips",
  "product_price" : 655,
  "product_material" : "Concrete",
  "product_color" : "mint green"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e4"),
  "id" : "2",
  "product_name" : "Practical Fresh Sausages",
  "product_price" : 911,
  "product_material" : "Cotton",
  "product_color" : "indigo"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e5"),
  "id" : "3",
```

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

Ans: db.products.find({product_price:{\$gt:500}}).limit(4).pretty()

```
@(shell):1:30
> db.products.find({product_price:{$gt:500}}).limit(4).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e3"),
  "id" : "1",
  "product_name" : "Intelligent Fresh Chips",
  "product_price" : 655,
  "product_material" : "Concrete",
  "product_color" : "mint green"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e4"),
  "id" : "2",
  "product_name" : "Practical Fresh Sausages",
  "product_price" : 911,
  "product_material" : "Cotton",
  "product_color" : "indigo"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e5"),
  "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: `db.products.find({}, {product_name:1, product_material:1}).pretty()`

```
@(shell):1:3
> db.products.find({}, {product_name:1, product_material:1}).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e3"),
  "product_name" : "Intelligent Fresh Chips",
  "product_material" : "Concrete"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e4"),
  "product_name" : "Practical Fresh Sausages",
  "product_material" : "Cotton"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e5"),
  "product_name" : "Refined Steel Car",
  "product_material" : "Rubber"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e6"),
  "product_name" : "Gorgeous Plastic Pants",
  "product_material" : "Soft"
}
```

6) Find the product with a row id of 10?

Ans: `db.products.find({id:{$eq:"10"}}).pretty()` (OR) `db.products.find({id:"10"}).pretty()`

```
> db.products.find({id:"10"}).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8ec"),
  "id" : "10",
  "product_name" : "Generic Wooden Pizza",
  "product_price" : 84,
  "product_material" : "Frozen",
  "product_color" : "indigo"
}
```

```
> db.products.find({id:{$eq:"10"}}).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8ec"),
  "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: db.products.find({}, {product_name:1, product_material:1, id:0}).pretty()

```
> db.products.find({}, {product_name:1, product_material:1, _id:0}).pretty()
{
  "product_name" : "Intelligent Fresh Chips",
  "product_material" : "Concrete"
}
{
  "product_name" : "Practical Fresh Sausages",
  "product_material" : "Cotton"
}
```

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

Ans: db.products.find({product_material: 'Soft'}).pretty()

```
> db.products.find({product_material: 'Soft'}).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e6"),
  "id" : "4",
  "product_name" : "Gorgeous Plastic Pants",
  "product_price" : 492,
  "product_material" : "Soft",
  "product_color" : "plum"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8eb"),
  "id" : "9",
  "product_name" : "Awesome Wooden Ball",
  "product_price" : 28,
  "product_material" : "Soft",
  "product_color" : "azure"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8ed"),
  "id" : "11",
```

9) Find products which contain product color indigo and product price 492.00?

Ans: `db.products.find({$or:[{product_color:'indigo'},{product__price:'492.00'}]}).pretty()`

```
> db.products.find({$or:[{product_color:'indigo'},{product__price:'492.00'}]}).pretty()
{
  "_id" : ObjectId("65df53bf45806e8457f0e8e4"),
  "id" : "2",
  "product_name" : "Practical Fresh Sausages",
  "product_price" : 911,
  "product_material" : "Cotton",
  "product_color" : "indigo"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8ec"),
  "id" : "10",
  "product_name" : "Generic Wooden Pizza",
  "product_price" : 84,
  "product_material" : "Frozen",
  "product_color" : "indigo"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8f3"),
  "id" : "17",
  "product_name" : "Incredible Metal Car",
  "product_price" : 36,
  "product_material" : "Fresh",
  "product_color" : "indigo"
}
{
  "_id" : ObjectId("65df53bf45806e8457f0e8fb"),
  "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.?

Answer :

```
db.products.aggregate([
  {
    $group: {
      _id: "$product_price",
      count: { $sum: 1 },
      ids: { $push: "$_id" }
    }
  },
  {
    $match: {
      count: { $gt: 1 }
    }
  }
]).forEach(function(doc) {
  doc.ids.shift();
  db.products.deleteMany({_id: {$in: doc.ids}});
});
print("Documents with duplicate product prices have been deleted successfully.");
```

```
> db.products.aggregate([
...   {
...     $group: {
...       _id: "$product_price",
...       count: { $sum: 1 },
...       ids: { $push: "$_id" }
...     }
...   },
...   {
...     $match: {
...       count: { $gt: 1 }
...     }
...   }
... ]).forEach(function(doc) {
...   doc.ids.shift();
...   db.products.deleteMany({_id: {$in: doc.ids}});
... });
> print("Documents with duplicate product prices have been deleted successfully.");
Documents with duplicate product prices have been deleted successfully.
> |
```