

MONGO DB CASE STUDY

Find all the information about each products

`db.products.find()`

```
>_MONGOSH
> db.products.find()
< {
  _id: ObjectId('6880fcc152c6b60573ed4a51'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a52'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a53'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a54'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
```

Find the product price which are between 400 to 800

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

```
> db.products.find({ product_price: { $gte: 400, $lte: 800 } })
< {
  _id: ObjectId('6880fcc152c6b60573ed4a51'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a53'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a54'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum'
}
```

Find the product price which are not between 400 to 600

```
db.products.find({ $or: [ { product_price: { $lt: 400 } }, { product_price: { $gt: 600 } } ] })
```

```
>_MONGOSH
> db.products.find({ $or: [ { product_price: { $lt: 400 } }, { product_price: { $gt: 600 } } ] })
< {
  _id: ObjectId('6880fcc152c6b60573ed4a51'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a52'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a53'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
```

List the four product which are greater than 500 in price

```
db.products.find({ product_price: { $gt: 500 } }).limit(4)
```

```
>_MONGOSH
> db.products.find({ product_price: { $gt: 500 } }).limit(4)
< {
  _id: ObjectId('6880fcc152c6b60573ed4a51'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a52'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a53'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
```

Find the product name and product material of each products

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

```
>_MONGOSH
> 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'
}
```

Find the product with a row id of 10

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

```
> db.products.find({ id: "10" })
< {
  _id: ObjectId('6880fcc152c6b60573ed4a5a'),
  id: '10',
  product_name: 'Generic Wooden Pizza',
  product_price: 84,
  product_material: 'Frozen',
  product_color: 'indigo'
}
```

Find only the product name and product material

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

`> _MONGOSH`

```
> 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'
```

```
}
```

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

```
db.products.find({ product_material: { $regex: "soft", $options: "i" } })
```

```
>_MONGOSH
> db.products.find({ product_material: { $regex: "soft", $options: "i" } })
< {
  _id: ObjectId('6880fcc152c6b60573ed4a54'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a59'),
  id: '9',
  product_name: 'Awesome Wooden Ball',
  product_price: 28,
  product_material: 'Soft',
  product_color: 'azure'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a5b'),
  id: '11',
  product_name: 'Unbranded Wooden Cheese',
  product_price: 26,
  product_material: 'Soft',
  product_color: 'black'
}
```

Find products which contain product color indigo and product price 492.00

```
db.products.find({ product_color: "indigo", product_price: 492 })
```

```
>_MONGOSH
> db.products.find({ product_color: "indigo", product_price: 492 })
<
```

Delete the products which product price value are same

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

```
> db.products.aggregate([
  { $group: { _id: "$product_price", count: { $sum: 1 }, ids: { $push: "$_id" } } },
  { $match: { count: { $gt: 1 } } }
])
< {
  _id: 47,
  count: 2,
  ids: [
    ObjectId('6880fcc152c6b60573ed4a60'),
    ObjectId('6880fcc152c6b60573ed4a68')
  ]
}
{
  _id: 36,
  count: 2,
  ids: [
    ObjectId('6880fcc152c6b60573ed4a61'),
    ObjectId('6880fcc152c6b60573ed4a64')
  ]
}
```

```
> _MONGOSH
> db.products.find().pretty()
< {
  _id: ObjectId('6880fcc152c6b60573ed4a51'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a52'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('6880fcc152c6b60573ed4a53'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
```