

# MongoDB Day 1

Database Name: GUVI-FSD-TASK

Collection Name: product

For the following question write the corresponding MongoDB queries

1. Find all the information about each products

Ans: `db.product.find();`

The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017' and the database 'GUVI-FSD-TASK'. The collection 'product' is selected. The left sidebar shows 'My Queries' and 'Performance' tabs. The main area displays the query `db.product.find();` and its results in a JSON array. The results show three documents with fields like `_id`, `id`, `product_name`, `product_price`, `product_material`, and `product_color`.

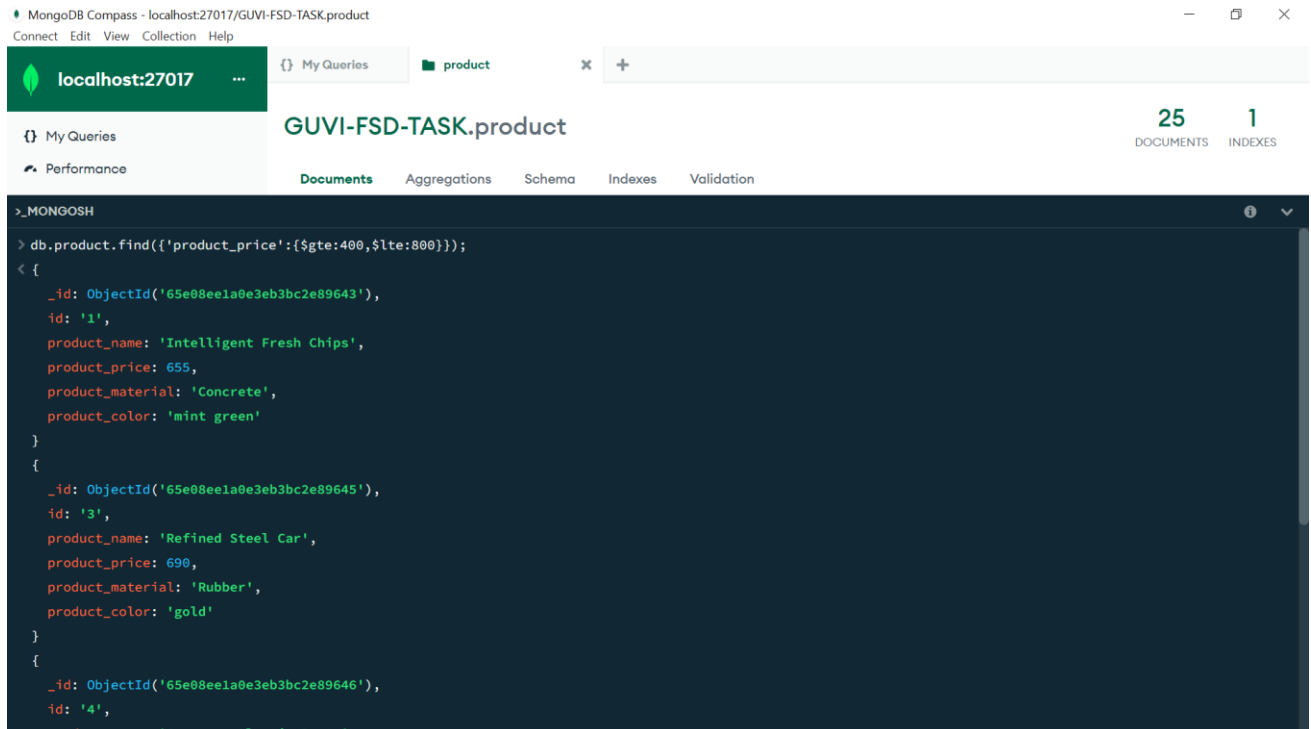
```
>_MONGOSH
> db.product.find();
< {
  _id: ObjectId('65e08ee1a0e3eb3bc2e89643'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89644'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89645'),
  id: '3',
  product_name: 'Refined Steel Car'
}
```

The screenshot also shows the MongoDB Compass interface with the query `db.product.find();` and its results. The results show three documents with fields like `_id`, `id`, `product_name`, `product_price`, `product_material`, and `product_color`.

```
>_MONGOSH
product_price: 95,
product_material: 'Cotton',
product_color: 'azure'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e8965a'),
  id: '24',
  product_name: 'Tasty Rubber Cheese',
  product_price: 47,
  product_material: 'Frozen',
  product_color: 'orchid'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e8965b'),
  id: '25',
  product_name: 'Licensed Steel Car',
  product_price: 20,
  product_material: 'Cotton',
  product_color: 'indigo'
}
GUVI-FSD-TASK
```

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

Ans: `db.product.find({'product_price':{$gte:400,$lte:800}});`

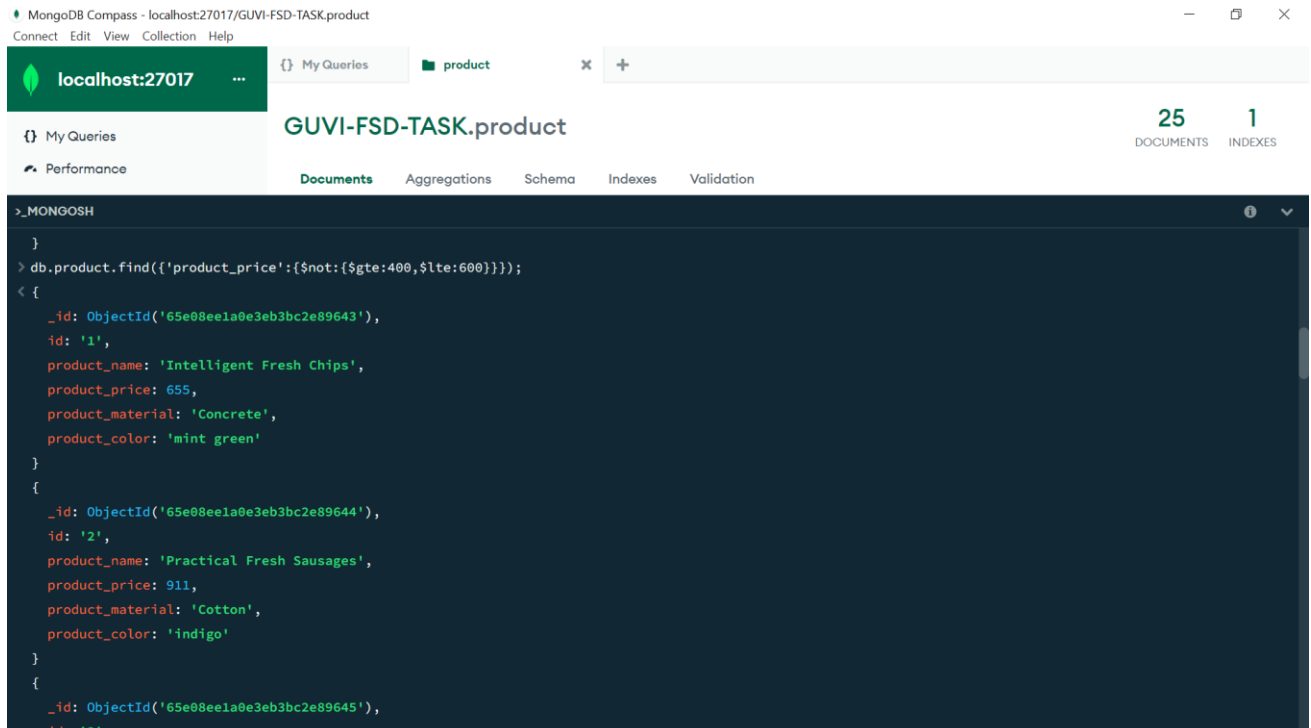


The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017' and the database 'GUVI-FSD-TASK.product'. The left sidebar shows the 'product' collection. The main area displays the query `db.product.find({'product_price':{$gte:400,$lte:800}});` and the results of the query. The results are shown in a JSON format, listing three products: 'Intelligent Fresh Chips' (price 655), 'Refined Steel Car' (price 690), and 'Gorgeous Plastic Pants' (price 750).

```
>_MONGOSH
> db.product.find({'product_price':{$gte:400,$lte:800}});
< {
  _id: ObjectId('65e08ee1a0e3eb3bc2e89643'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89645'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89646'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 750,
  product_material: 'Cotton',
  product_color: 'indigo'
}
```

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

Ans: `db.product.find({'product_price':{$not:{$gte:400,$lte:600}}});`

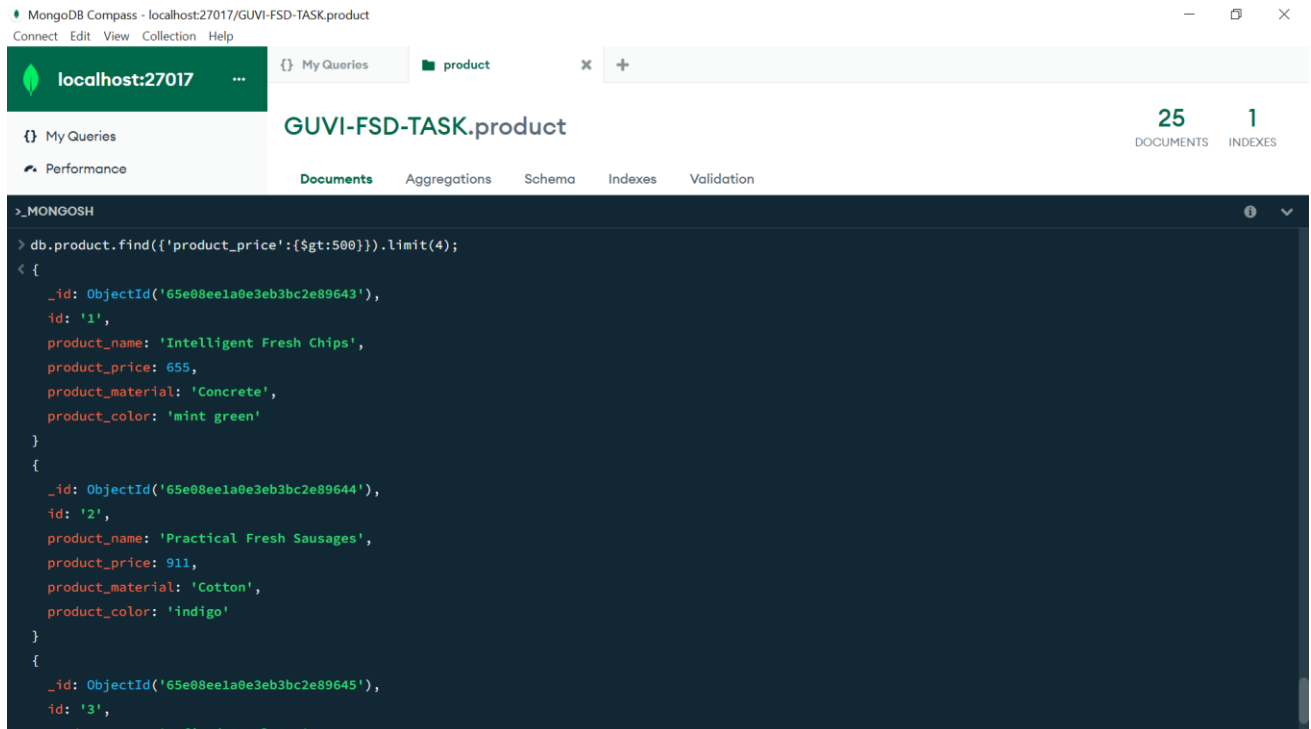


The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017' and the database 'GUVI-FSD-TASK.product'. The left sidebar shows the 'product' collection. The main area displays the query `db.product.find({'product_price':{$not:{$gte:400,$lte:600}}});` and the results of the query. The results are shown in a JSON format, listing three products: 'Intelligent Fresh Chips' (price 655), 'Practical Fresh Sausages' (price 911), and 'Refined Steel Car' (price 690).

```
>_MONGOSH
> db.product.find({'product_price':{$not:{$gte:400,$lte:600}}});
< {
  _id: ObjectId('65e08ee1a0e3eb3bc2e89643'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89644'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89645'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_price: 690,
  product_material: 'Rubber',
  product_color: 'gold'
}
```

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

Ans: `db.product.find({'product_price':{$gt:500}}).limit(4);`

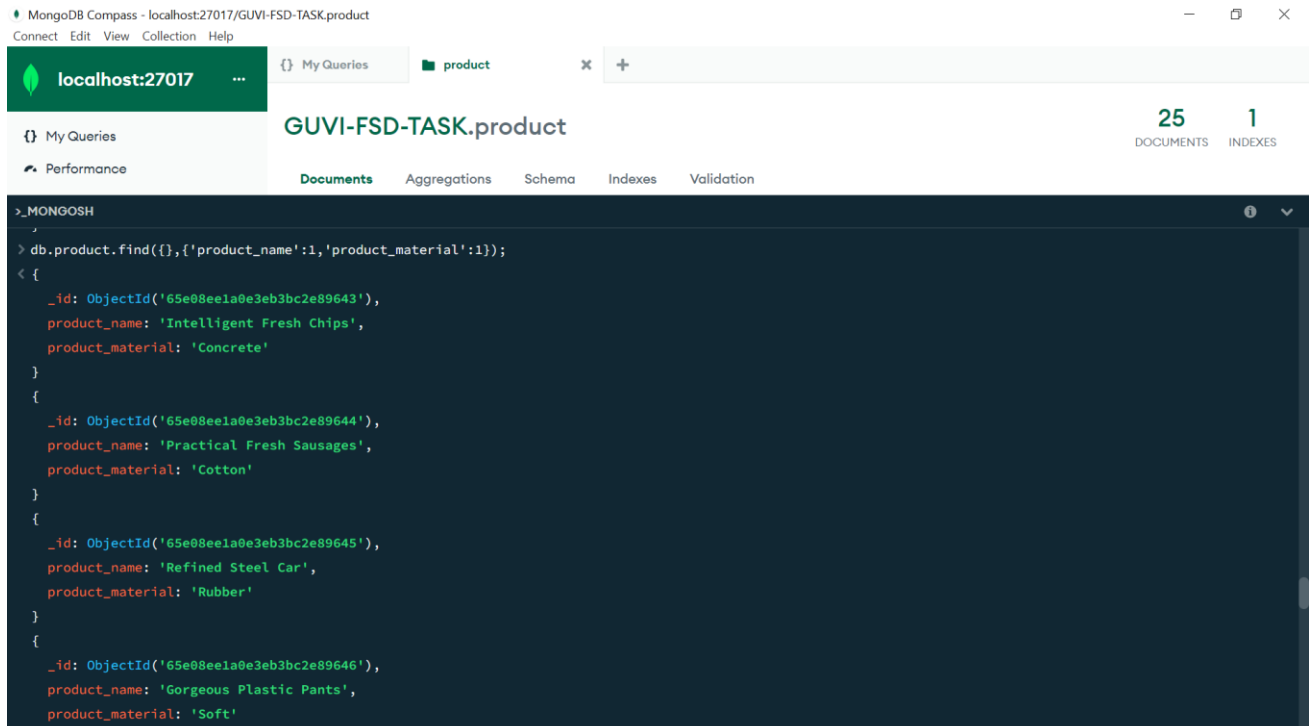


The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017/GUVI-FSD-TASK/product'. The left sidebar shows 'My Queries' and 'Performance' tabs. The main panel displays the 'product' collection with 25 documents and 1 index. The 'Documents' tab is active, showing a list of documents. The query entered in the command window is `db.product.find({'product_price':{$gt:500}}).limit(4);`. The results show four documents:

```
>_MONGOSH
> db.product.find({'product_price':{$gt:500}}).limit(4);
< {
  _id: ObjectId('65e08ee1a0e3eb3bc2e89643'),
  id: '1',
  product_name: 'Intelligent Fresh Chips',
  product_price: 655,
  product_material: 'Concrete',
  product_color: 'mint green'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89644'),
  id: '2',
  product_name: 'Practical Fresh Sausages',
  product_price: 911,
  product_material: 'Cotton',
  product_color: 'indigo'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89645'),
  id: '3',
  product_name: 'Refined Steel Car',
  product_material: 'Rubber'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89646'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_material: 'Soft'
}
```

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

Ans: `db.product.find({},{'product_name':1,'product_material':1});`

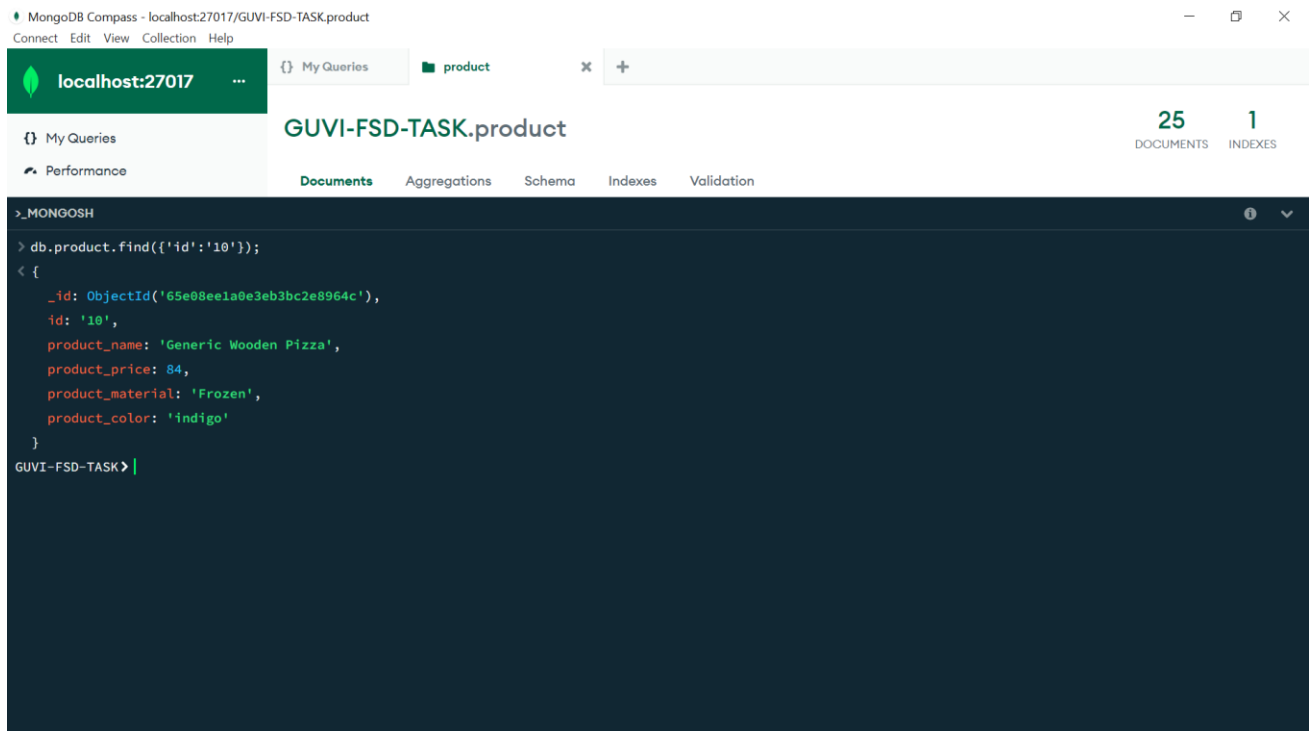


The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017/GUVI-FSD-TASK/product'. The left sidebar shows 'My Queries' and 'Performance' tabs. The main panel displays the 'product' collection with 25 documents and 1 index. The 'Documents' tab is active, showing a list of documents. The query entered in the command window is `db.product.find({},{'product_name':1,'product_material':1});`. The results show five documents:

```
>_MONGOSH
> db.product.find({},{'product_name':1,'product_material':1});
< {
  _id: ObjectId('65e08ee1a0e3eb3bc2e89643'),
  product_name: 'Intelligent Fresh Chips',
  product_material: 'Concrete'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89644'),
  product_name: 'Practical Fresh Sausages',
  product_material: 'Cotton'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89645'),
  product_name: 'Refined Steel Car',
  product_material: 'Rubber'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e89646'),
  product_name: 'Gorgeous Plastic Pants',
  product_material: 'Soft'
}
```

6. Find the product with a row id of 10

Ans: `db.product.find({'id':'10'})`;

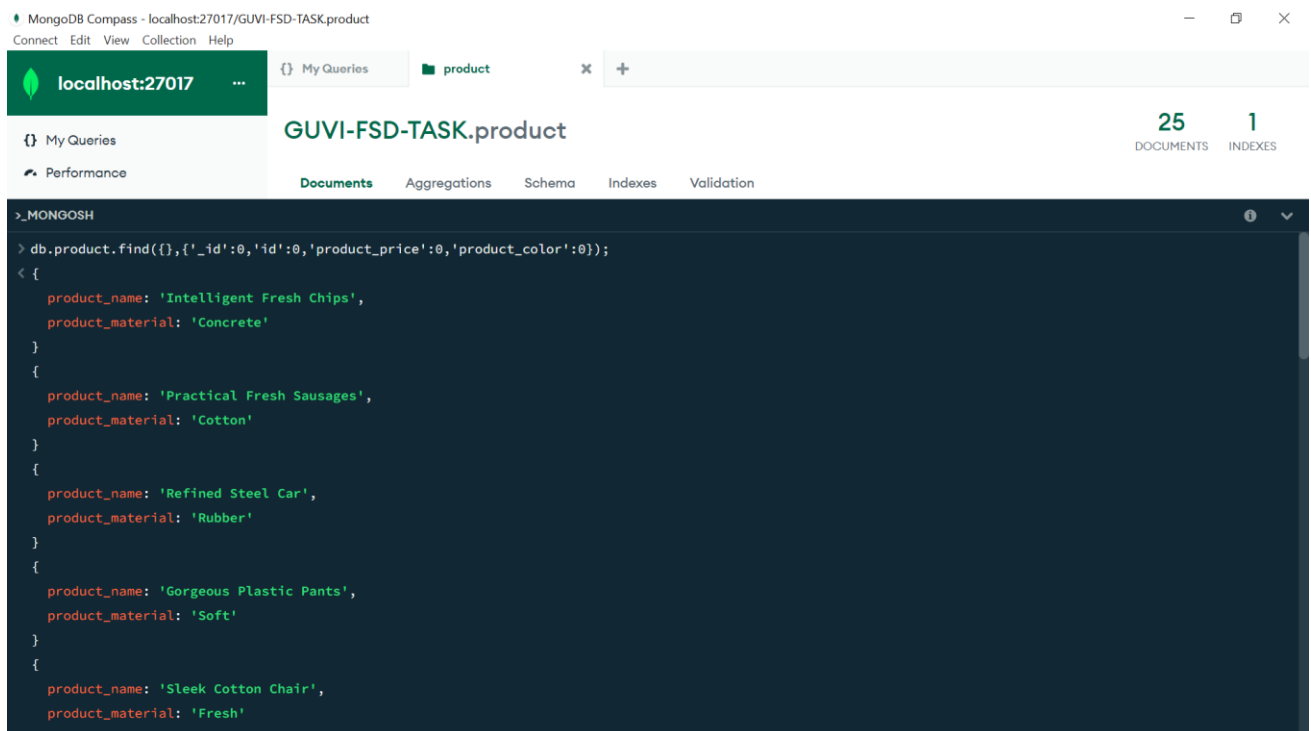


The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017/GUVI-FSD-TASK.product'. The left sidebar shows 'My Queries' and 'Performance' tabs. The main panel displays the 'product' collection with 25 documents and 1 index. The 'Documents' tab is active, showing a single document for the product with id '10'.

```
>_MONGOSH
> db.product.find({'id':'10'});
< {
  _id: ObjectId('65e08ee1a0e3bc2e8964c'),
  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.product.find({},{'_id':0,'id':0,'product_price':0,'product_color':0});`

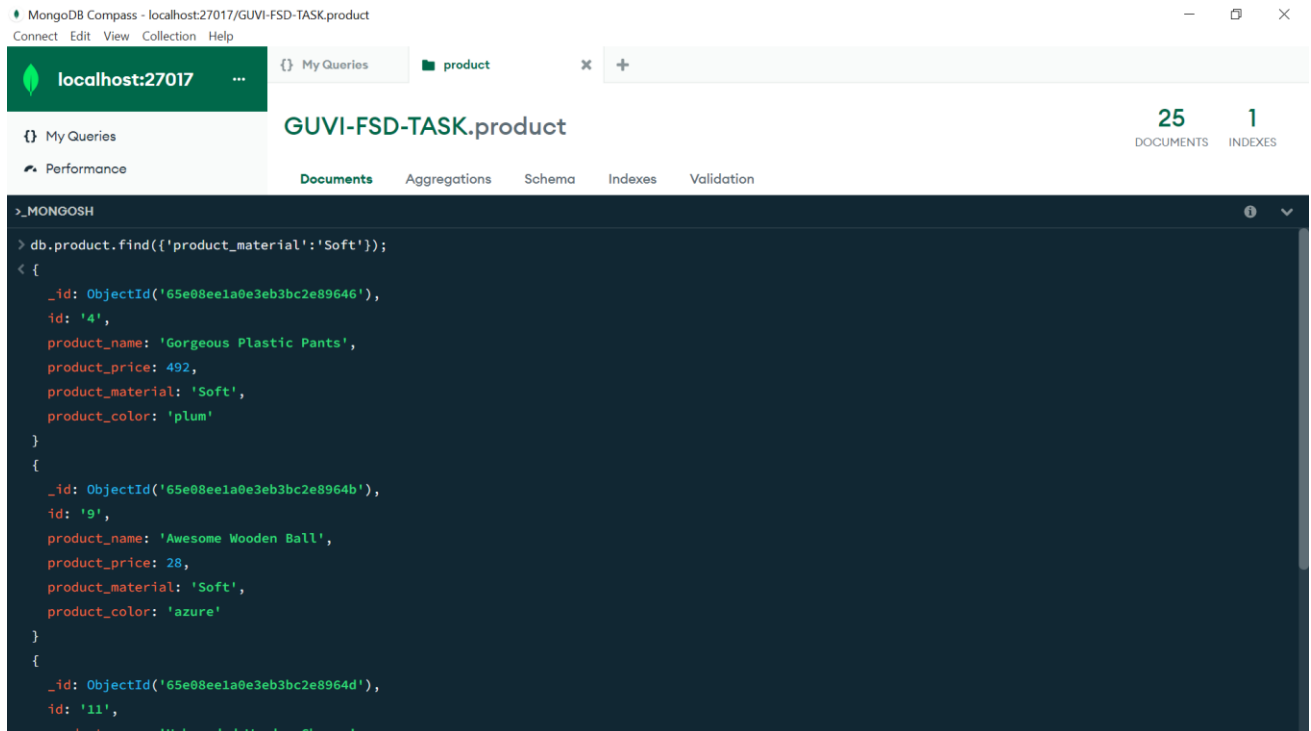


The screenshot shows the MongoDB Compass interface with the same connection and collection. The 'Documents' tab is active, showing a list of products with only the 'product\_name' and 'product\_material' fields displayed, as requested in the query.

```
>_MONGOSH
> db.product.find({},{'_id':0,'id':0,'product_price':0,'product_color':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'
}
```

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

Ans: `db.product.find({'product_material':'Soft'})`;



The screenshot shows the MongoDB Compass interface. The top bar indicates the connection to 'localhost:27017/GUVI-FSD-TASK.product'. The left sidebar shows 'My Queries' and 'Performance' tabs. The main panel displays the 'product' collection with 25 documents and 1 index. The 'Documents' tab is active, showing a list of documents. The first document is expanded, showing the following fields:

```
>_MONGOSH
> db.product.find({'product_material':'Soft'})
< {
  _id: ObjectId('65e08ee1a0e3eb3bc2e89646'),
  id: '4',
  product_name: 'Gorgeous Plastic Pants',
  product_price: 492,
  product_material: 'Soft',
  product_color: 'plum'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e8964b'),
  id: '9',
  product_name: 'Awesome Wooden Ball',
  product_price: 28,
  product_material: 'Soft',
  product_color: 'azure'
}
{
  _id: ObjectId('65e08ee1a0e3eb3bc2e8964d'),
  id: '11',
  product_name: 'Webheaded Wooden Chess'
```

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

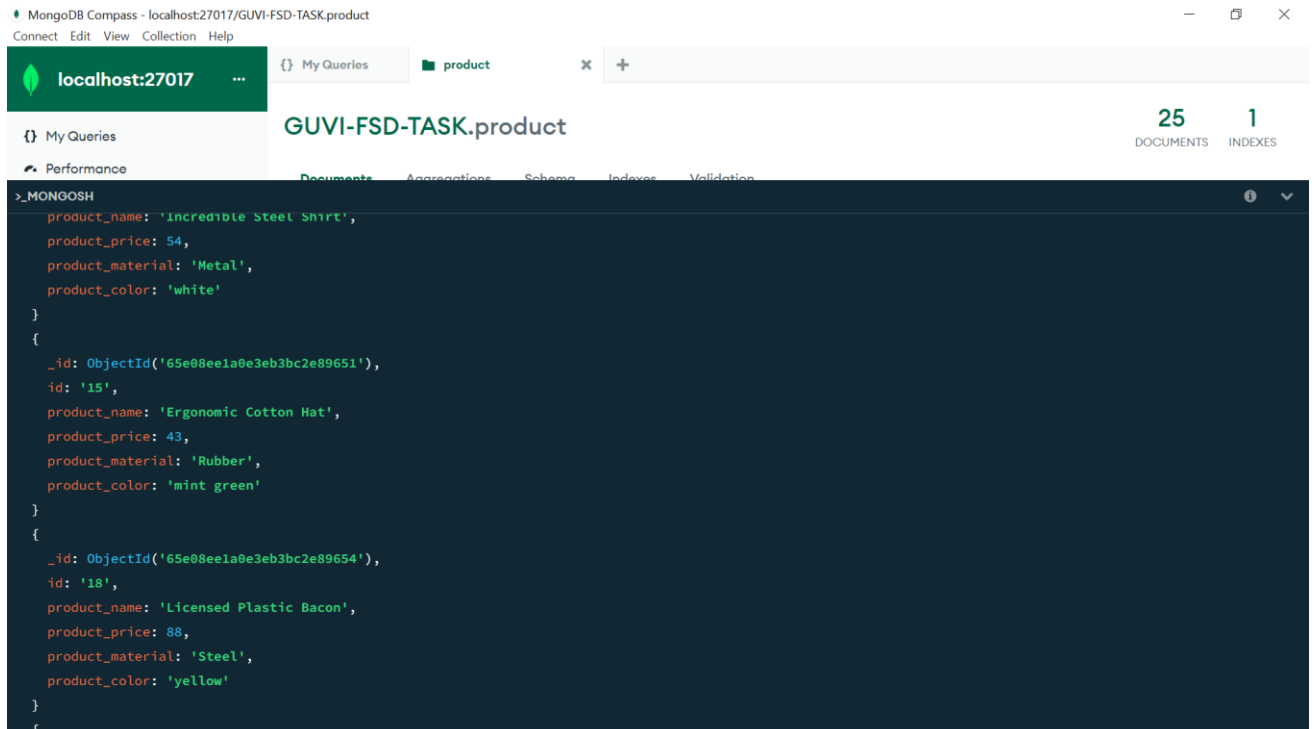
Ans: `db.product.find({'$and':{'product_color':'indigo'},{'product_price':492}})`;

Output: No products are match for the given condition.

10. Delete the products which product price value are same

Ans: `db.Products.aggregate([ { $group: { _id: '$product_price', count: { $sum: 1 } } }, { $match: { count: { $gt: 1 } } } ] ).forEach((e) => { db.Products.deleteMany({ product_price: e._id });});`

Output: Product with 'id' 16, 17, 20 and 24 are deleted.



MongoDB Compass - localhost:27017/GUVI-FSD-TASK:product

Connect Edit View Collection Help

localhost:27017 ... {} My Queries product x +

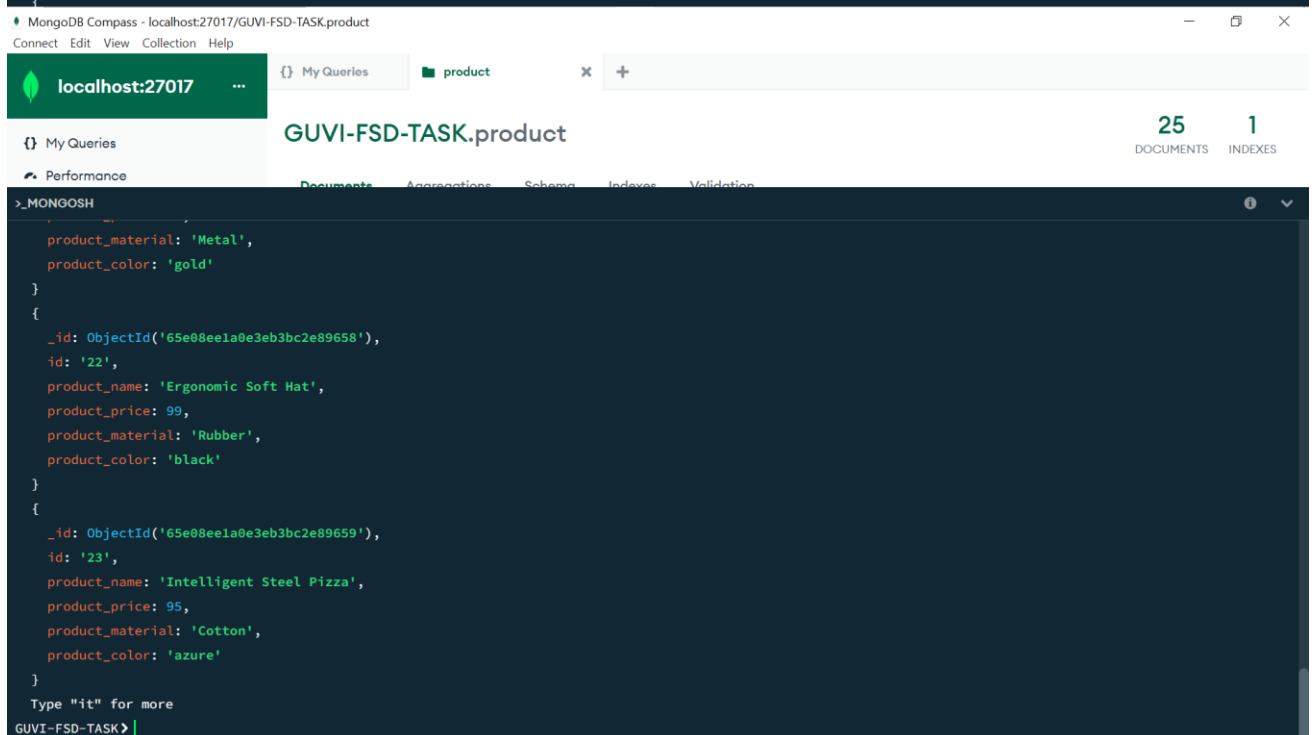
GUVI-FSD-TASK.product

25 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

>\_MONGODB

```
product_name: 'Incredible Steel Shirt',
product_price: 54,
product_material: 'Metal',
product_color: 'white'
}
{
  _id: ObjectId('65e08ee1a9e3eb3bc2e89651'),
  id: '15',
  product_name: 'Ergonomic Cotton Hat',
  product_price: 43,
  product_material: 'Rubber',
  product_color: 'mint green'
}
{
  _id: ObjectId('65e08ee1a9e3eb3bc2e89654'),
  id: '18',
  product_name: 'Licensed Plastic Bacon',
  product_price: 88,
  product_material: 'Steel',
  product_color: 'yellow'
}
```



MongoDB Compass - localhost:27017/GUVI-FSD-TASK:product

Connect Edit View Collection Help

localhost:27017 ... {} My Queries product x +

GUVI-FSD-TASK.product

25 DOCUMENTS 1 INDEXES

Documents Aggregations Schema Indexes Validation

>\_MONGODB

```
product_material: 'Metal',
product_color: 'gold'
}
{
  _id: ObjectId('65e08ee1a9e3eb3bc2e89658'),
  id: '22',
  product_name: 'Ergonomic Soft Hat',
  product_price: 99,
  product_material: 'Rubber',
  product_color: 'black'
}
{
  _id: ObjectId('65e08ee1a9e3eb3bc2e89659'),
  id: '23',
  product_name: 'Intelligent Steel Pizza',
  product_price: 95,
  product_material: 'Cotton',
  product_color: 'azure'
}
Type "it" for more
GUVI-FSD-TASK> |
```