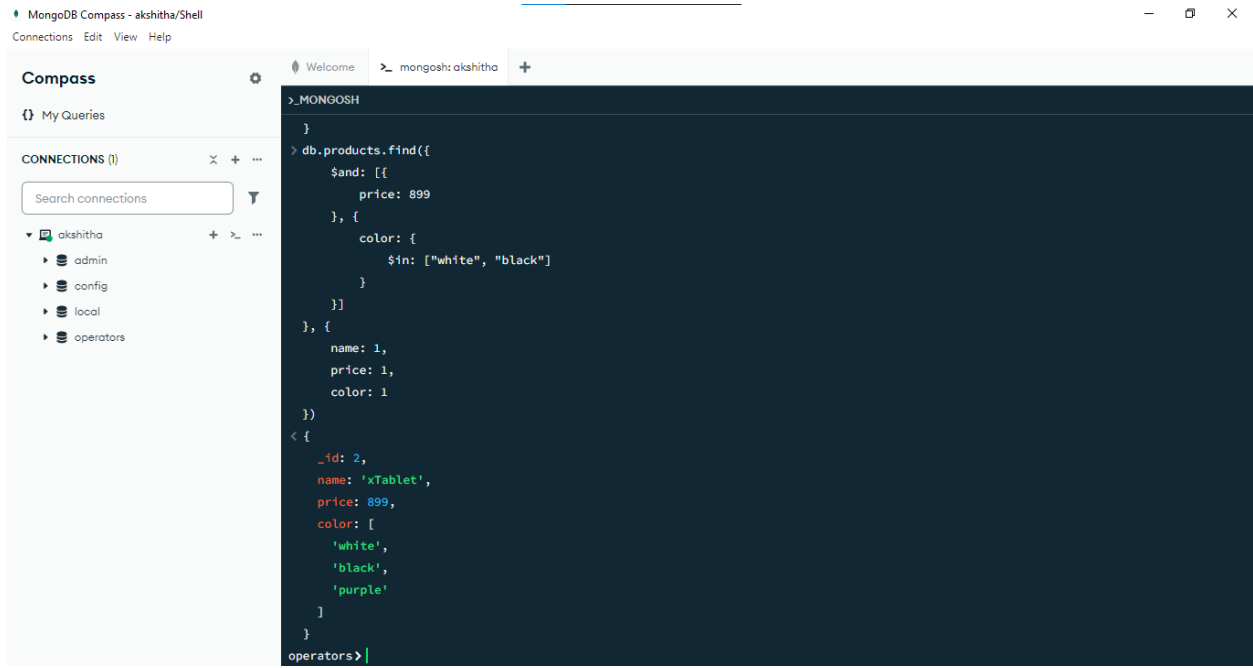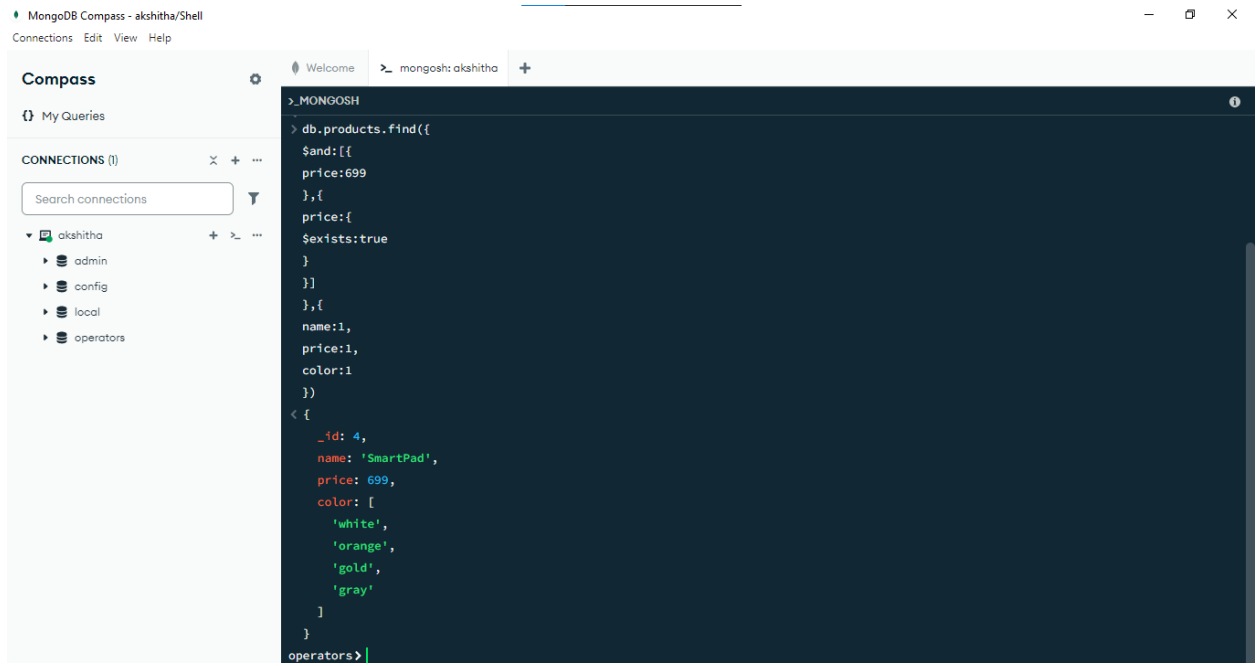# MONGODB

And operator:

Element Operators:

- ## $exists

```
db.products.find({
$and:[{
price:699
},{
price:{
$exists:true
}
}]
},{
name:1,
price:1,
color:1
})
{
    _id: 4,
    name: 'SmartPad',
    price: 699,
    color: [
      'white',
      'orange',
      'gold',
      'gray'
    ]
}
operators>
```
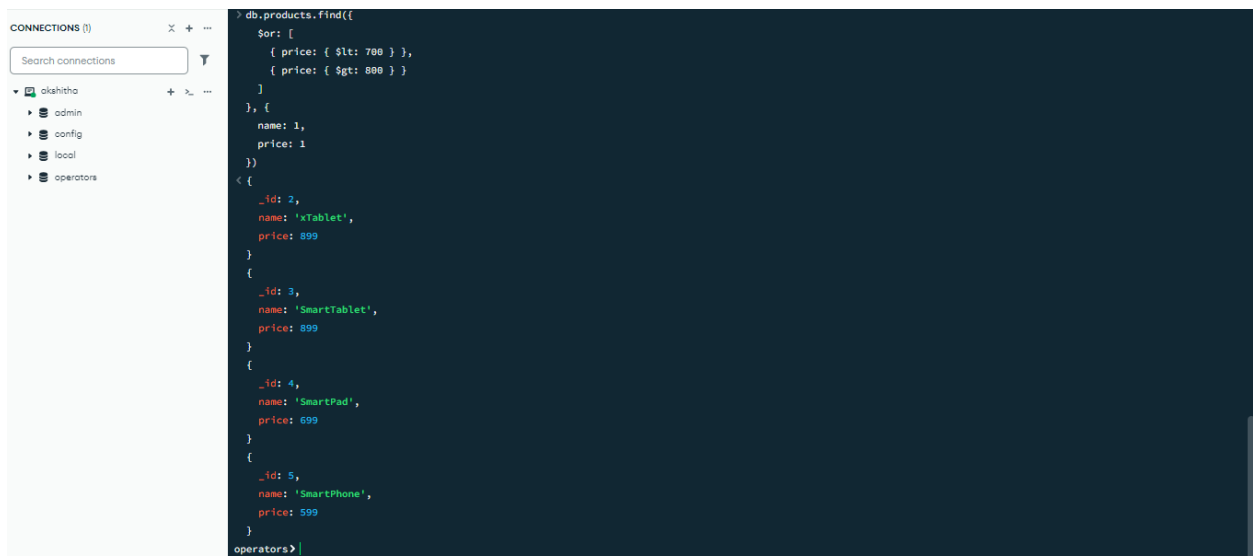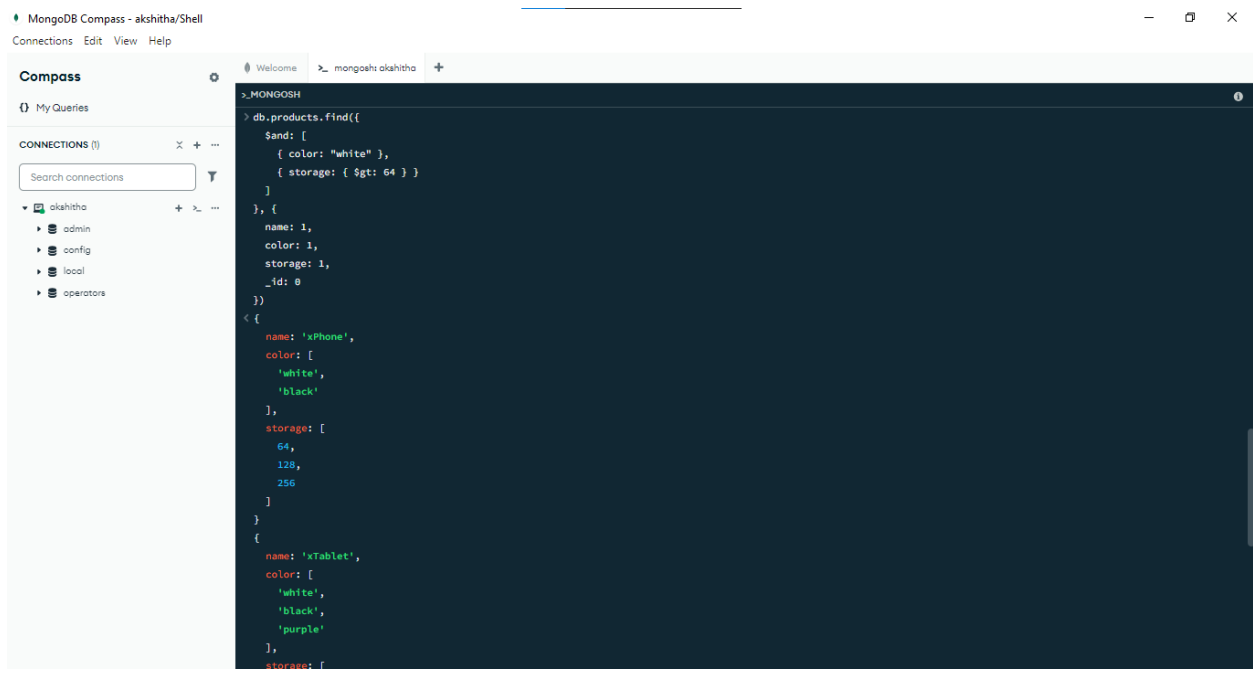
```
db.products.find({price:{$eq:699,$exists:true}},{name:1,price:1})
{
    _id: 4,
    name: 'SmartPad',
    price: 699
}
```

Or operator:


```
db.products.find({
$or: [
    { price: { $lt: 700 } },
    { price: { $gt: 800 } }
]
}, {
name: 1,
price: 1
})
{
    _id: 2,
    name: 'xTablet',
    price: 899
}
{
    _id: 3,
    name: 'SmartTablet',
    price: 899
}
{
    _id: 4,
    name: 'SmartPad',
    price: 699
}
{
    _id: 5,
    name: 'SmartPhone',
    price: 599
}
operators>
```

Compass

{} My Queries

CONNECTIONS (1)

Search connections

- akshitha
  - admin
  - config
  - local
  - operators

>_MONGOSH

```
> db.products.find({
    $and: [
      { color: { $regex: '^b', $options: 'i' } },
      { "spec.ram": { $lte: 4 } }
    ]
}, {
    name: 1,
    color: 1,
    "spec.ram": 1,
    _id: 0
})
< {
    name: 'xPhone',
    spec: {
      ram: 4
    },
    color: [
      'white',
      'black'
    ]
  }
operators>
```

>_MONGOSH

```
> db.products.find({
    $and: [
      { color: "white" },
      { storage: { $gt: 64 } }
    ]
}, {
    name: 1,
    color: 1,
    storage: 1,
    _id: 0
})
< {
    name: 'xPhone',
    color: [
      'white',
      'black'
    ],
    storage: [
      64,
      128,
      256
    ]
  }
  {
    name: 'xTablet',
    color: [
      'white',
      'black',
      'purple'
    ],
    storage: [
```

Not operator:

[90m 8 |[39m name[33m:[39m[35m1[39m[33m,[39m
[90m 9 |[39m price[33m:[39m[35m1[39m
[90m 10 |[39m }[0m

```
> db.products.find({
price:{
$not:{
$gt:699
}

}},{
name:1,
price:1
}
)
< {
    _id: 4,
    name: 'SmartPad',
    price: 699
}
{
    _id: 5,
    name: 'SmartPhone',
    price: 599
}
{
    _id: 6,
    name: 'xWidget'
}
operators>
```
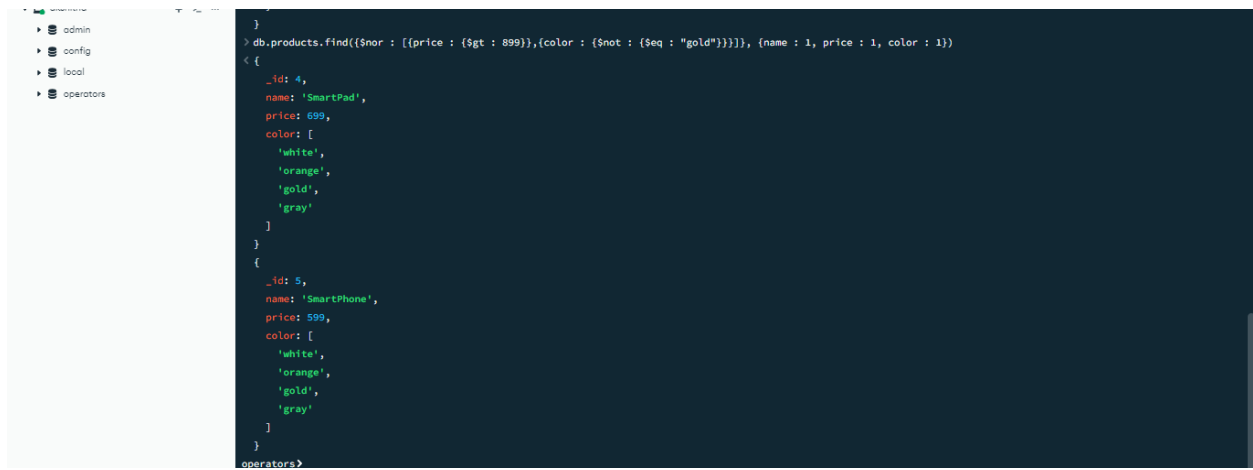
```
    }
> db.products.find(
    {
        name: { $not: /smart/i }
    },
    {
        name: 1,
        price: 1
    }
)
< {
    _id: 1,
    name: 'xPhone',
    price: 799
}
{
    _id: 2,
    name: 'xTablet',
    price: 899
}
{
    _id: 6,
    name: 'xWidget'
}
operators>
```

Nor(operator):

```
              [90m 5 | [39m [0m
> db.products.find({
    $nor:[
    {price:899},
    {color:"gold"}

    ]},{
    name:1,
    price:1,
    color:1,
    _id:0

    })
< {
    name: 'xPhone',
    price: 799,
    color: [
      'white',
      'black'
    ]
  }
  {
    name: 'xWidget',
    color: [
      'black'
    ]
  }
operators>
```

```
  }
> db.products.find({$nor : [{price : {$gt : 899}},{color : {$not : {$eq : "gold"}}}]}, {name : 1, price : 1, color : 1})
< {
    _id: 4,
    name: 'SmartPad',
    price: 699,
    color: [
      'white',
      'orange',
      'gold',
      'gray'
    ]
  }
  {
    _id: 5,
    name: 'SmartPhone',
    price: 599,
    color: [
      'white',
      'orange',
      'gold',
      'gray'
    ]
  }
operators>
```

Exisits:

Connections Edit View Help

Compass
{} My Queries

CONNECTIONS (1)
Search connections

akshitha
  admin
  config
  local
  operators

Welcome   mongosh: akshitha

```
>_MONGOSH

> db.products.find({
    price:{
        $exists:true
    }


},{
name:1,price:1

})
< {
    _id: 1,
    name: 'xPhone',
    price: 799
}
{
    _id: 2,
    name: 'xTablet',
    price: 899
}
{
    _id: 3,
    name: 'SmartTablet',
    price: 899
}
{
    _id: 4,
    name: 'SmartPad',
    price: 699
}
{
    _id: 5,
    name: 'SmartPhone',
    price: 599
}
{
    _id: 7,
    name: 'xReader',
    price: null
}
operators >
```
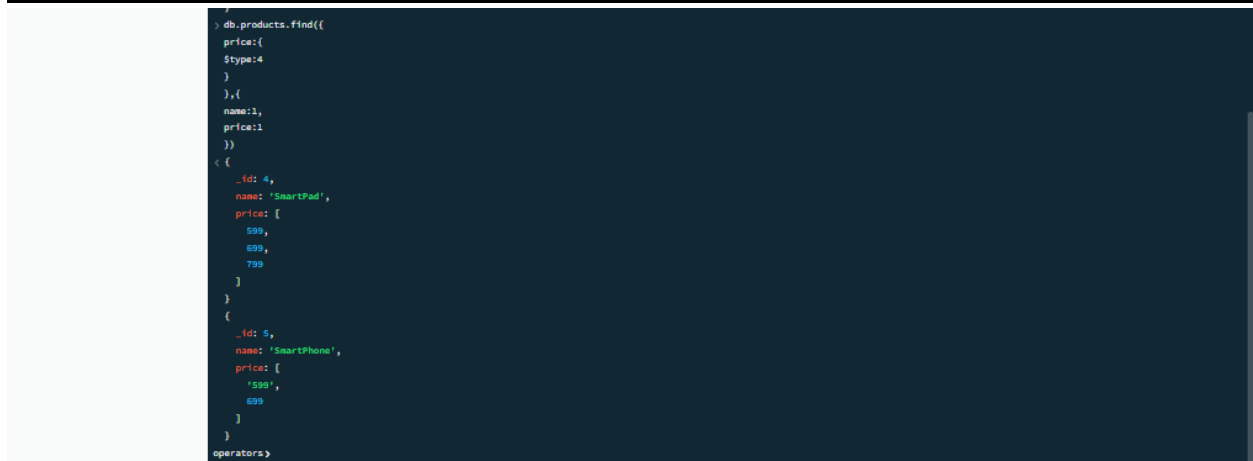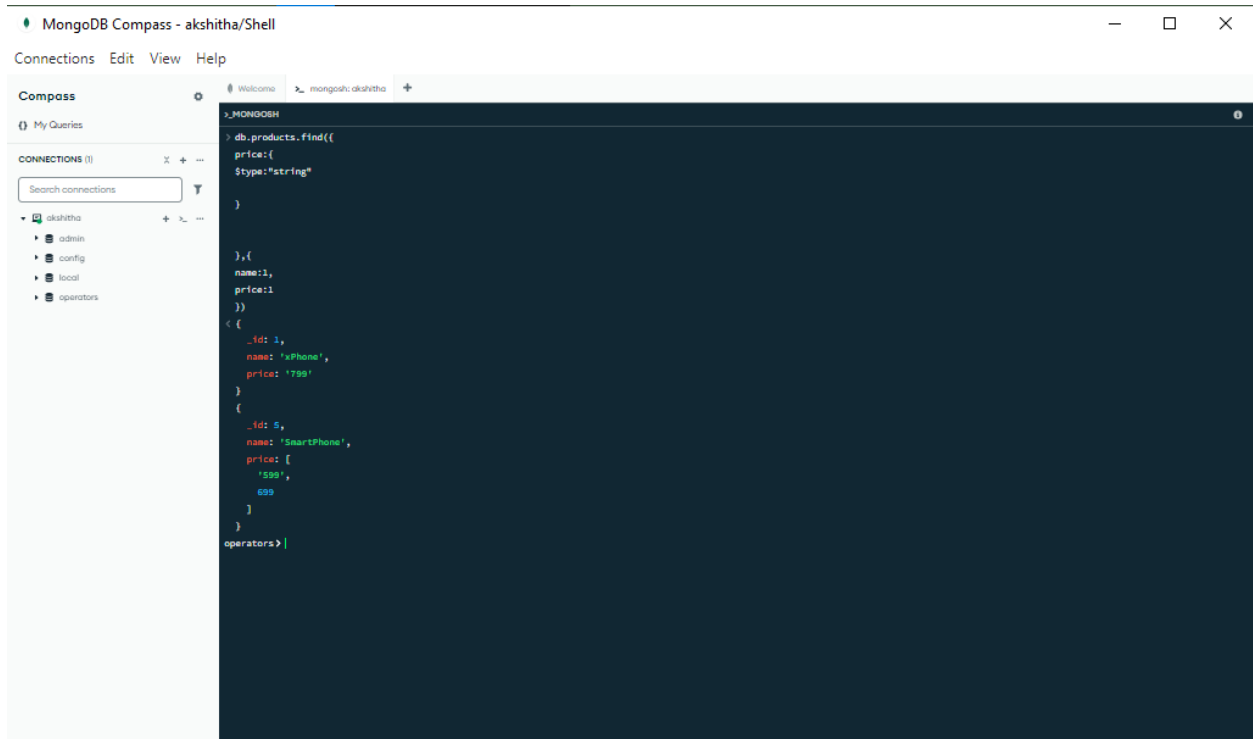
```
}
> db.products.find(
    {
        $or: [
            { releaseDate: { $exists: false } },
            { "spec.ram": { $gt: 0 } }
        ]
    },
    { name: 1, releaseDate: 1, "spec.ram": 1, _id: 0 }
)
< {
    name: 'xTablet',
    releaseDate: 2011-05-01T00:00:00.000Z,
    spec: {
        ram: 16
    }
}
{
    name: 'SmartTablet',
    releaseDate: 2015-01-14T00:00:00.000Z,
    spec: {
        ram: 12
    }
}
{
    name: 'xWidget',
    spec: {
        ram: 64
    }
}
{
    name: 'xReader',
    spec: {
        ram: 64
    }
}
operators >
```

Type(operator):


```
> db.products.find({
  price:{
  $type:"string"

  }

},{
name:1,
price:1
})
< {
    _id: 1,
    name: 'xPhone',
    price: '799'
  }
  {
    _id: 5,
    name: 'SmartPhone',
    price: [
      '599',
      699
    ]
  }
operators >
```

```
> db.products.find({
  price:{
  $type:2
  }
},{
name:1,
price:1
})
< {
    _id: 1,
    name: 'xPhone',
    price: '799'
  }
  {
    _id: 5,
    name: 'SmartPhone',
    price: [
      '599',
      699
    ]
  }
operators >
```

```
> db.products.find({
  price:{
  $type:4
  }
},{
name:1,
price:1
})
< {
    _id: 4,
    name: 'SmartPad',
    price: [
      599,
      699,
      799
    ]
  }
  {
    _id: 5,
    name: 'SmartPhone',
    price: [
      '599',
      699
    ]
  }
operators >
```
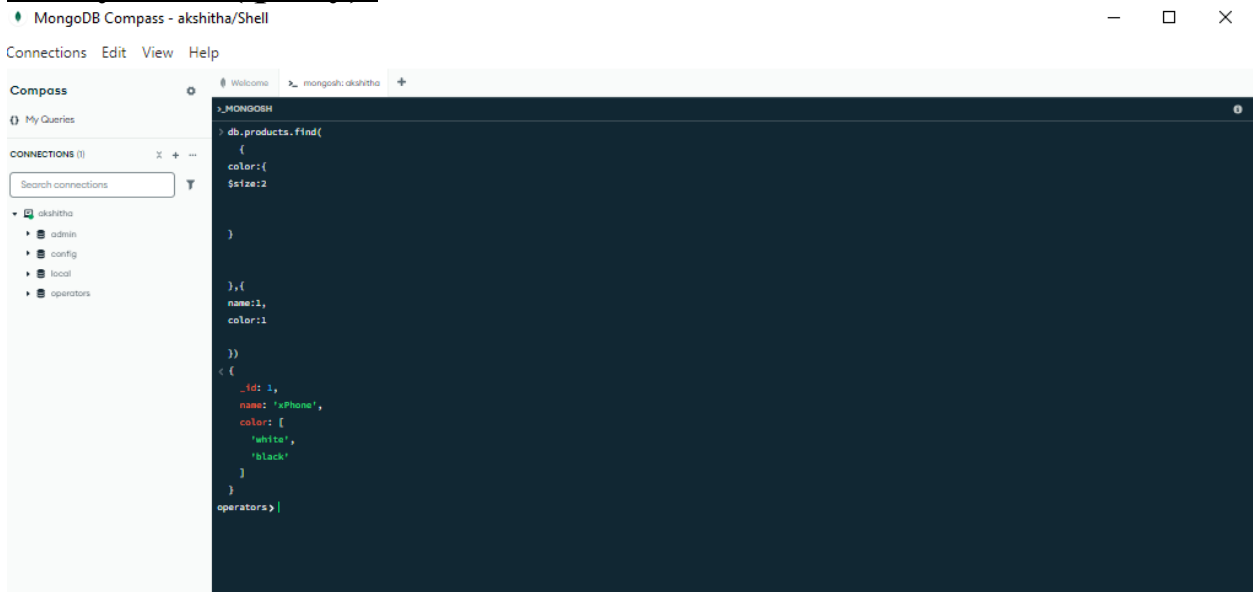
Two types without using and or (or) operator:

```
> db.products.find({price:{$type:1},price:{$type:2}},{name:1,price:1});
< {
    _id: 1,
    name: 'xPhone',
    price: '799'
  }
  {
    _id: 5,
    name: 'SmartPhone',
    price: [
      '599',
      699
    ]
  }
operators>
```



```
> db.products.find({
    price: { $exists: true, $type: "array",$gt: 600}},
    {name: 1,price: 1, _id: 0})
< {
    name: 'SmartPad',
    price: [
      599,
      699,
      799
    ]
  }
  {
    name: 'SmartPhone',
    price: [
      '599',
      699
    ]
  }
operators>
```

Array index(query):


```
> db.products.find(
    {
    color:{
    $size:2


    }


    },{
    name:1,
    color:1

    })
< {
    _id: 1,
    name: 'xPhone',
    color: [
      'white',
      'black'
    ]
  }
operators>
```
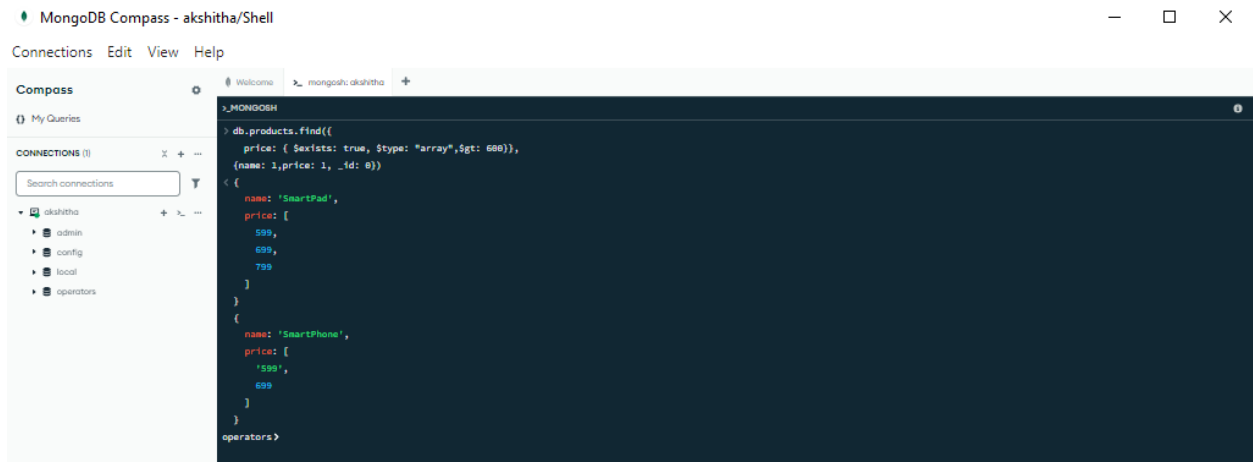
```
        }
> db.products.find({
    $or: [
        { color: { $size: 1 } },
        { color: { $size: 2 } }
    ]
}, {
    name: 1,
    color: 1
})
< {
    _id: 1,
    name: 'xPhone',
    color: [
        'white',
        'black'
    ]
}
{
    _id: 3,
    name: 'SmartTablet',
    color: [
        'blue'
    ]
}
{
    _id: 6,
    name: 'xWidget',
    color: [
        'black'
    ]
}
operators >
```