

```

> db.products.find({$and:[{price:899},{color:{$in:["white","black"]}}] },{name:1,price:1,color:1})
< {
  _id: 2,
  name: 'xTablet',
  price: 899,
  color: [
    'white',
    'black',
    'purple'
  ]
}
> 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'
  ]
}

```

```

> db.products.find({price:{$eq:699,$exists:true}},{name:1, price:1})
< {
  _id: 4,
  name: 'SmartPad',
  price: 699
}
> db.products.find( {$or: [{price: { $lte: 700}}, {price: {$gte: 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
}

```

```
> db.products.find({$and:[{color:{$regex:/^b/}},{"spec.ram":{$gt:4}}]},{name:1,price:1,color:1,"spec.r
< {
  _id: 2,
  name: 'xTablet',
  price: 899,
  spec: {
    ram: 16
  },
  color: [
    'white',
    'black',
    'purple'
  ]
}
{
  _id: 3,
  name: 'SmartTablet',
  price: 899,
  spec: {
    ram: 12
  },
  color: [
    'blue'
  ]
}
{
  _id: 6,
  name: 'xWidget',
  spec: {
```

```
> db.products.find({$and:[{color:'white'},{storage:{$gt:64}}]}, {name:1,price:1,color:1,storage:1})
< {
  _id: 1,
  name: 'xPhone',
  price: 799,
  color: [
    'white',
    'black'
  ],
  storage: [
    64,
    128,
    256
  ]
}
{
  _id: 2,
  name: 'xTablet',
  price: 899,
  color: [
    'white',
    'black',
    'purple'
  ],
  storage: [
    128,
    256,
    512
  ]
}
```

```
    }  
  }  
  {  
    _id: 4,  
    name: 'SmartPad',  
    price: 699,  
    color: [  
      'white',  
      'orange',  
      'gold',  
      'gray'  
    ],  
    storage: [  
      128,  
      256,  
      1024  
    ]  
  }  
  {  
    _id: 5,  
    name: 'SmartPhone',  
    price: 599,  
    color: [  
      'white',  
      'orange',  
      'gold',  
      'gray'  
    ],  
    storage: [  

```

```
> db.products.find({
  "name":{$not:{$in:[/smart/i]}}},
  {name:1,_id:0})
< {
  name: 'xPhone'
}
{
  name: 'xTablet'
}
{
  name: 'xWidget'
}
> db.products.find({$nor : [{price : {$eq:899}},{color : /gold/}],{name : 1,color : 1,price:1})
< {
  _id: 1,
  name: 'xPhone',
  price: 799,
  color: [
    'white',
    'black'
  ]
}
{
  _id: 6,
  name: 'xWidget',
  color: [
    'black'
  ]
}
```

```
> 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'
```

```
> db.products.find({price:{$exists: true,$gt:699}},{name:1,price:1})
< {
  _id: 1,
  name: 'xPhone',
  price: 799
}
{
  _id: 2,
  name: 'xTablet',
  price: 899
}
{
  _id: 3,
  name: 'SmartTablet',
  price: 899
}
```

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

```
> db.products. find({
  price: {
    $type: 2

  }

}, {

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



```
> 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
  ]
}
```

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

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

```
> db.products.find({color:{$size:2}},{name:1, color:1})
< {
  _id: 1,
  name: 'xPhone',
  color: [
    'white',
    'black'
  ]
}
```

```
> 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'
  ]
}
```

