

```

> db.products.find({$and:[{price:899},{color:{$in:["white","black"]}}]}, {name:1,_id:0})
< {
  name: 'xTablet'
}
> db.products.find({$and:[{price:699},{price:{$exists:true}}]}, {name:1,_id:0})
< {
  name: 'SmartPad'
}
> db.products.find({price:{$eq:699,$exists:true}}, {name:1,_id:0,color:1})
< {
  name: 'SmartPad',
  color: [
    'white',
    'orange',
    'gold',
    'gray'
  ]
}
> db.products.find({$and: [{ "price": { $lte: 800 } }, { "price": { $gte: 700 } } ]})
< {
  _id: 1,
  name: 'xPhone',
  price: 799,
  releaseDate: 2011-05-14T00:00:00.000Z,
  spec: {
    ram: 4,
    screen: 6.5,
    cpu: 2.66
  },
  color: [
    'white',
    'black'
  ],
  storage: [
    64,
    128,
    256
  ]
}
> db.products.find({$and:[{color:{$in:[/^b/]}},{ "spec.ram":{$gte:4}}]}, {name:1,price:1,color:1})
< {
  _id: 1,
  name: 'xPhone',
  price: 799,
  color: [
    'white',
    'black'
  ]
}
{
  _id: 2,
  name: 'xTablet',
  price: 899,
  color: [
    'white',
    'black',
    'purple'
  ]
}
{
  _id: 3,
  name: 'SmartTablet',
  price: 899,
  color: [
    'blue'
  ]
}
{
  _id: 6,
  name: 'xWidget',
  color: [
    'black'
  ]
}

```

```
> db.products.find({$and:[{color:"white"},{storage:{$gt:64}}]},{name:1,price:1,color:1})
```

```
< {
  _id: 1,
  name: 'xPhone',
  price: 799,
  color: [
    'white',
    'black'
  ]
}
{
  _id: 2,
  name: 'xTablet',
  price: 899,
  color: [
    'white',
    'black',
    'purple'
  ]
}
{
  _id: 4,
  name: 'SmartPad',
  price: 699,
  color: [
    'white',
    'orange',
    'gold',
    'gray'
  ]
}
{
  _id: 5,
  name: 'SmartPhone',
  price: 599,
  color: [
    'white',
    'orange',
    'gold',
    'gray'
  ]
}
```

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

```
< {
  _id: 4,
  name: 'SmartPad',
  price: 699,
  releaseDate: 2020-05-14T00:00:00.000Z,
  spec: {
    ram: 8,
    screen: 9.7,
    cpu: 1.66
  },
  color: [
    'white',
    'orange',
    'gold',
    'gray'
  ],
  storage: [
    128,
    256,
    1024
  ]
}
{
  _id: 5,
  name: 'SmartPhone',
  price: 599,
  releaseDate: 2022-09-14T00:00:00.000Z,
  spec: {
    ram: 4,
    screen: 9.7,
    cpu: 1.66
  },
}
```

```
> db.products.find({"name":{$not:{$in:[/smart/i]}}},{name:1,_id:0})
```

```
< {
  name: 'xPhone'
}
{
  name: 'xTablet'
}
{
  name: 'xWidget'
}
```

```
> db.products.find({$nor:[{color:"gold"},{price:899}]},{name:1,price:1,color:1,_id:0})
< {
  name: 'xPhone',
  price: 799,
  color: [
    'white',
    'black'
  ]
}
{
  name: 'xWidget',
  color: [
    'black'
  ]
}
> db.products.find({$nor:[{"spec.cpu":{"$eq:2.66"}},{storage:256}]},{name:1,price:1,color:1,_id:0,storage:1})
< {
  name: 'SmartTablet',
  price: 899,
  color: [
    'blue'
  ],
  storage: [
    16,
    64,
    128
  ]
}
{
  name: 'xWidget',
  color: [
    'black'
  ],
  storage: [
    1024
  ]
}
> db.products.find({price:{$exists:true}},{name:1,_id:0})
< {
  name: 'xPhone'
}
{
  name: 'xTablet'
}
{
  name: 'SmartTablet'
}
{
  name: 'SmartPad'
}
{
  name: 'SmartPhone'
}
{
  name: 'xReader'
}
> db.products.find({price:{$exists:false}},{name:1,_id:0})
< {
  name: 'xWidget'
}
> db.products.find({price:{$type:4}},{name:1,price:1,_id:0})
< {
  name: 'SmartPad',
  price: [
    599,
    699,
    799
  ]
}
{
  name: 'SmartPhone',
  price: [
    '599',
    699
  ]
}
> db.products.find({price:{$exists:true,$type:4,$gt:699}},{name:1,price:1,_id:0})
< {
  name: 'SmartPad',
  price: [
    599,
    699,
    799
  ]
}
```

```
> db.products.find({storage:{size:1}}, {name:1, _id:0})
< {
  name: 'xWidget'
}
> db.products.find({storage:{size:2}}, {name:1, _id:0})
< {
  name: 'SmartPhone'
}
> db.products.find(
  {
    $or: [
      { storage: { $size: 1 } },
      { storage: { $size: 2 } }
    ]
  },
  { name: 1, _id: 0 }
)
< {
  name: 'SmartPhone'
}
{
  name: 'xWidget'
}
```