

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

```
> db.products.find({color:{$all:["black","white"]}}, {name:1,color:1})
```

```
< {
```

```
  _id: 1,
```

```
  name: 'xPhone',
```

```
  color: [
```

```
    'white',
```

```
    'black'
```

```
  ]
```

```
}
```

```
{
```

```
  _id: 2,
```

```
  name: 'xTablet',
```

```
  color: [
```

```
    'white',
```

```
    'black',
```

```
    'purple'
```

```
  ]
```

```
}
```

```
> db.products.find(  
  {  
    $and: [  
      { color: 'black' },  
      { color: 'white' }  
    ]  
  },  
  { color: 1 }  
)
```

```
< {  
  _id: 1,  
  color: [  
    'white',  
    'black'  
  ]  
}  
  
{  
  _id: 2,  
  color: [  
    'white',  
    'black',  
    'purple'  
  ]  
}
```

```
> db.products.find({storage:{$lt:128}}, {name:1, storage:1});
```

```
< {
```

```
  _id: 1,
```

```
  name: 'xPhone',
```

```
  storage: [
```

```
    64,
```

```
    128,
```

```
    256
```

```
  ]
```

```
}
```

```
{
```

```
  _id: 3,
```

```
  name: 'SmartTablet',
```

```
  storage: [
```

```
    16,
```

```
    64,
```

```
    128
```

```
  ]
```

```
}
```

```
> db.products.find({storage:{$elemMatch:{$lt:128}}},{name:1,storage:1});
```

```
< {
```

```
  _id: 1,
```

```
  name: 'xPhone',
```

```
  storage: [
```

```
    64,
```

```
    128,
```

```
    256
```

```
  ]
```

```
}
```

```
{
```

```
  _id: 3,
```

```
  name: 'SmartTablet',
```

```
  storage: [
```

```
    16,
```

```
    64,
```

```
    128
```

```
  ]
```

```
}
```

```
> db.products.find({storage:{$elemMatch:{$lt:128}}},{name:1,storage:1}).sort({price:1});  
< {  
  _id: 1,  
  name: 'xPhone',  
  storage: [  
    64,  
    128,  
    256  
  ]  
}  
{  
  _id: 3,  
  name: 'SmartTablet',  
  storage: [  
    16,  
    64,  
    128  
  ]  
}
```

```
> db.products.find({'price':{'$exists:1'}},{name:1,price:1}).sort({price:1 })
```

```
< {
```

```
  _id: 5,
```

```
  name: 'SmartPhone',
```

```
  price: 599
```

```
}
```

```
{
```

```
  _id: 4,
```

```
  name: 'SmartPad',
```

```
  price: 699
```

```
}
```

```
{
```

```
  _id: 1,
```

```
  name: 'xPhone',
```

```
  price: 799
```

```
}
```

```
{
```

```
  _id: 2,
```

```
  name: 'xTablet',
```

```
  price: 899
```

```
}
```

```
{
```

```
  _id: 3,
```

```
  name: 'SmartTablet',
```

```
  price: 899
```

```
}
```

```
> db.products.find({'price':{'$exists:1'}},{name:1,price:1}).sort({price:1,name:-1 })
```

```
< {
```

```
  _id: 5,
```

```
  name: 'SmartPhone',
```

```
  price: 599
```

```
}
```

```
{
```

```
  _id: 4,
```

```
  name: 'SmartPad',
```

```
  price: 699
```

```
}
```

```
{
```

```
  _id: 1,
```

```
  name: 'xPhone',
```

```
  price: 799
```

```
}
```

```
{
```

```
  _id: 2,
```

```
  name: 'xTablet',
```

```
  price: 899
```

```
}
```

```
{
```

```
  _id: 3,
```

```
  name: 'SmartTablet',
```

```
  price: 899
```

```
}
```



```
> db.products.find({'price':{$exists:1}},{name:1,price:1}).sort({price:1,name:-1 }).limit(1)
```

```
< {
```

```
  _id: 5,
```

```
  name: 'SmartPhone',
```

```
  price: 599
```

```
}
```

```
> db.products.find({price : {$gt : 599}},{price : 1}).skip(1)
```

```
< {
```

```
  _id: 2,
```

```
  price: 899
```

```
}
```

```
{
```

```
  _id: 3,
```

```
  price: 899
```

```
}
```

```
{
```

```
  _id: 4,
```

```
  price: 699
```

```
}
```

```
> db.products.find(
  {
    releaseDate: { $exists: true },
    _id: { $mod: [2, 0] } // Filter even _id (or use another numeric field)
  },
  {
    name: 1,
    releaseDate: 1
  }
)
.sort({ releaseDate: 1 })
.skip(1)      // Skip first 2 matching documents
.limit(8)     // Get next 5
< {
  _id: 4,
  name: 'SmartPad',
  releaseDate: 2020-05-14T00:00:00.000Z
}
```

```
> db.products.find({}, {name:1, price:1}).sort({price:-1, name:1}).skip(2).limit(2);
```

```
< {
```

```
  _id: 1,
```

```
  name: 'xPhone',
```

```
  price: 799
```

```
}
```

```
{
```

```
  _id: 4,
```

```
  name: 'SmartPad',
```

```
  price: 699
```

```
}
```

```
> db.products.updateOne({_id:1}, {$set:{price:899}})
```

```
< {
```

```
  acknowledged: true,
```

```
  insertedId: null,
```

```
  matchedCount: 1,
```

```
  modifiedCount: 1,
```

```
  upsertedCount: 0
```

```
}
```

```
> db.products.updateOne({price:899}, {$set:{price:null}})
```

```
< {
```

```
  acknowledged: true,
```

```
  insertedId: null,
```

```
  matchedCount: 1,
```

```
  modifiedCount: 1,
```

```
  upsertedCount: 0
```

```
}
```