

```
> db.products.deleteOne({})
< {
  acknowledged: true,
  deletedCount: 1
}
> db.products.find()
< {
  _id: 2,
  name: 'xTablet',
  price: 899,
  releaseDate: 2011-09-01T00:00:00.000Z,
  spec: {
    ram: 16,
    screen: 9.5,
    cpu: 3.66
  },
  color: [
    'white',
    'black',
    'purple'
  ],
  storage: [
    128,
    256,
    512
  ]
}
```

```
> db.products.deleteOne({
  'spec.ram': {$gt: 8}
})
< {
  acknowledged: true,
  deletedCount: 1
}
```

```
> db.products.deleteMany({price:{$gte:699}})
< {
  acknowledged: true,
  deletedCount: 1
}
> db.products.find()
< {
  _id: 5,
  name: 'SmartPhone',
  price: 599,
  releaseDate: 2022-09-14T00:00:00.000Z,
  spec: {
    ram: 4,
    screen: 9.7,
    cpu: 1.66
  },
  color: [
    'white',
    'orange',
    'gold',
    'gray'
  ],
  storage: [
    128,
    256
  ]
}
```

```
> db.products.deleteMany({ "spec.screen": 9.7 })
< {
  acknowledged: true,
  deletedCount: 1
}
> db.products.find()
<
```

```
> db.sales.aggregate([{$match:{item:"Americanos"}},
  {$group:{_id:"$size", totalQty:{$sum:"$quantity"}}},
  {$sort:{totalQty:-1}}])
< {
  _id: 'Grande',
  totalQty: 33
}
{
  _id: 'Short',
  totalQty: 22
}
{
  _id: 'Tall',
  totalQty: 15
}
```

```
> db.sales.aggregate([
  { $group:{_id:'$item', averageQty:{$avg:'$quantity'}}
})
< {
  _id: 'Americanos',
  averageQty: 17.5
}
{
  _id: 'Lattes',
  averageQty: 27.5
}
{
  _id: 'Cappuccino',
  averageQty: 16.333333333333332
}
{
  _id: 'Mochas',
  averageQty: 11
}
```

```
> db.sales.aggregate([{$match:{price:{$gt:8}}},
  {$group:{_id:'item',avgPrice:{$avg:'$price'}}},
])
< {
  _id: 'item',
  avgPrice: 15.833333333333334
}
```

```
> db.sales.aggregate([{$group: {_id: '$item', avgpara: {$avg: {$multiply: ['$price', '$quantity']}}}}])
< {
  _id: 'Americanos',
  avgpara: 140
}
{
  _id: 'Lattes',
  avgpara: 562.5
}
{
  _id: 'Cappuccino',
  avgpara: 127.33333333333333
}
{
  _id: 'Mochas',
  avgpara: 275
}
```

```
> db.sales.aggregate([{$group:
  {_id: '$item', avgpara: {$avg: {$multiply: ['$price', '$quantity']}}}}, {
  $match: {
    avgpara: { $gt: 140 }
  }
},
{
  $sort: {
    avgpara: -1
  }
}])
< {
  _id: 'Lattes',
  avgpara: 562.5
}
{
  _id: 'Mochas',
  avgpara: 275
}
```

```
> db.sales.aggregate([{$group: {_id: '$item', itemcount: {$count: {}}}}])
< {
  _id: 'Cappuccino',
  itemcount: 3
}
{
  _id: 'Mochas',
  itemcount: 1
}
{
  _id: 'Lattes',
  itemcount: 2
}
{
  _id: 'Americanos',
  itemcount: 4
}
```

```
> db.sales.aggregate([{$group: {_id: "$item", sumItems: {$sum: "$quantity"}}}])
< {
  _id: 'Cappuccino',
  sumItems: 49
}
{
  _id: 'Mochas',
  sumItems: 11
}
{
  _id: 'Americanos',
  sumItems: 70
}
{
  _id: 'Lattes',
  sumItems: 55
}
```

```

> db.sales.aggregate([{$group: {_id: "$item", sumItems: {$sum: "$price"}}},
    {$match: {sumItems: {$gt: 100}}}] ).limit(2)
✖ ▶ TypeError: db.sales.aggre ... 0}}]).limit is not a function
> db.sales.aggregate([{$group: {_id: "$item", sumItems: {$sum: "$price"}}},
    {$match: {sumItems: {$gt: 100}}}, {$limit: 2}])
<
> db.sales.aggregate([{$group: {_id: "$item", sumItems: {$sum: "$price"}}},
    {$match: {sumItems: {$gte: 100}}}, {$limit: 2}])
<
> db.sales.aggregate([{$group: {_id: "$item", sumItems: {$sum: "$price"}}},
    {$match: {sumItems: {$gte: 10}}}, {$limit: 2}])
< {
  _id: 'Cappuccino',
  sumItems: 23
}
{
  _id: 'Lattes',
  sumItems: 40
}

```

```

> db.sales.aggregate([{$group: {_id: "$item", sumItems: {$sum: "$price"}}},
    {$sort: {sumItems: -1}}])
< {
  _id: 'Lattes',
  sumItems: 40
}
{
  _id: 'Americanos',
  sumItems: 33
}
{
  _id: 'Mochas',
  sumItems: 25
}
{
  _id: 'Cappuccino',
  sumItems: 23
}

```



```

> db.sales.aggregate({$group:{_id:null, maxQty:{$max:'$quantity'}}})
< {
  _id: null,
  maxQty: 30
}
> db.sales.aggregate([{$group:{_id:null, maxQty:{$max:'$quantity'}}},{$project:{_id:0}}])
< {
  maxQty: 30
}
> db.sales.aggregate([{$group:{_id:'$item', minQty:{$min:'$quantity'}}},{$project:{_id:0}}])
< {
  minQty: 12
}
{
  minQty: 12
}
{
  minQty: 11
}
{
  minQty: 25
}

```

```

> db.sales.aggregate([{$group:{_id:'$item', minQty:{$min:'$quantity'}}},{$project:{_id:1}}])
< {
  _id: 'Americanos'
}
{
  _id: 'Cappuccino'
}
{
  _id: 'Mochas'
}
{
  _id: 'Lattes'
}

```

```
> db.sales.aggregate([{$group:{_id:'$item', minQty:{$min:'$quantity'}}},{ $project:{_id:1, minQty:1}}])
< {
  _id: 'Lattes',
  minQty: 25
}
{
  _id: 'Cappuccino',
  minQty: 12
}
{
  _id: 'Mochas',
  minQty: 11
}
{
  _id: 'Americanos',
  minQty: 12
}
```