

```
> db.sales.aggregate([{$group: {_id: '$item', averageQty: {$avg: '$quantity'}},},},])
```

```
< {
  _id: 'Americanos',
  averageQty: 17.5
}
{
  _id: 'Mochas',
  averageQty: 11
}
{
  _id: 'Cappuccino',
  averageQty: 16.333333333333332
}
{
  _id: 'Lattes',
  averageQty: 27.5
}
```

```
> db.sales1.aggregate([{$match: {price: {$gte: 8}}},
```

```
  {
    $group: {
      _id: "$item",
      averagePrice: { $avg: "$price" }
    }
  }
]);
```

```
<
> { $match: { quantity: { $gt: 8 } } },
  {
    $group: {
      _id: "$item",
      avgPrice: { $avg: "$price" }
    }
  }
}
```

```
> db.sales.aggregate([{$match:{price:{$gt:8}}},{ $group: {_id:"$item",avgprice:{$avg:"$price"}}}]);
```

```
< {
```

```
  _id: 'Cappuccino',
```

```
  avgprice: 10
```

```
}
```

```
{
```

```
  _id: 'Americanos',
```

```
  avgprice: 10
```

```
}
```

```
{
```

```
  _id: 'Lattes',
```

```
  avgprice: 20
```

```
}
```

```
{
```

```
  _id: 'Mochas',
```

```
  avgprice: 25
```

```
}
```

```
> db.sales.aggregate([{$group: {_id:'$item',avgRevenue:{$avg:{$multiply:['$price','$quantity']}}}}])
```

```
< {
```

```
  _id: 'Cappuccino',
```

```
  avgRevenue: 127.33333333333333
```

```
}
```

```
{
```

```
  _id: 'Lattes',
```

```
  avgRevenue: 562.5
```

```
}
```

```
{
```

```
  _id: 'Americanos',
```

```
  avgRevenue: 140
```

```
}
```

```
{
```

```
  _id: 'Mochas',
```

```
> db.sales.aggregate([{$group:{_id:"$item",avgprice:{$avg:{$multiply:["$price","$quantity"]}}}},  
                      {$match:{avgprice:{$gte:140}}},  
                      {$sort:{avgprice:-1}}]])
```

```
< {  
  _id: 'Lattes',  
  avgprice: 562.5  
}  
  
{  
  _id: 'Mochas',  
  avgprice: 275  
}  
  
{  
  _id: 'Americanos',  
  avgprice: 140  
}
```

```
> db.sales.drop()
```

```
< true
```

```
> db.sales.aggregate([
  {
    $group: {
      _id: "$item",
      itemCount: { $sum: 1 }
    }
  },
  {
    $match: {
      itemCount: { $gt: 2 }
    }
  }
])
< {
  _id: 'Cappuccino',
  itemCount: 3
}
{
  _id: 'Americanos',
  itemCount: 4
}
> db.sales.aggregate([
  {
    $group: {
      _id: "$item",
      itemCount: { $count: {} }
    }
  }
])
```

```
> db.sales.aggregate([{$group: {_id: "$item", sumItems: {$sum: "$quantity"}}}])
```

```
< {  
  _id: 'Lattes',  
  sumItems: 55  
}  
{  
  _id: 'Mochas',  
  sumItems: 11  
}  
{  
  _id: 'Cappuccino',  
  sumItems: 49  
}  
{  
  _id: 'Americanos',  
  sumItems: 70  
}
```

```
> db.sales.aggregate([  
  {  
    $group: {  
      _id: "$item",  
      totalQuantity: { $sum: "$quantity" }  
    }  
  },  
  {  
    $match: {  
      totalQuantity: { $gt: 100 }  
    }  
  }  
])
```

```
<
```

```
> db.sales.aggregate([
  {
    $group: {
      _id: "$item",
      totalRevenue: { $sum: { $multiply: ["$price", "$quantity"] } }
    }
  },
  {
    $match: {
      totalRevenue: { $gt: 100 }
    }
  },
  {
    $sort: { totalRevenue: -1 }
  }
])
```

```
< {
  _id: 'Lattes',
  totalRevenue: 1125
}
{
  _id: 'Americanos',
  totalRevenue: 560
}
{
  _id: 'Cappuccino',
  totalRevenue: 382
}
{
  _id: 'Mochas',
  totalRevenue: 275
}
```