

```

> db.sales.aggregate([
  {
    $group: {
      _id: "$item",
      maxQuantity: { $max: "$quantity" }
    }
  }
])
< {
  _id: 'Cappuccino',
  maxQuantity: 20
}
{
  _id: 'Mochas',
  maxQuantity: 11
}
{
  _id: 'Americanos',
  maxQuantity: 22
}
{
  _id: 'Lattes',
  maxQuantity: 30
}
> db.sales.aggregate({$group:{_id:"$item",maxQty:{$max:"$quantity"}}})
< {
  _id: 'Lattes',
  maxQty: 30
}
{
  _id: 'Cappuccino',
  maxQty: 20
}
{
  _id: 'Americanos',
  maxQty: 22
}
{
  _id: 'Mochas',
  maxQty: 11
}
> db.sales.aggregate({$group:{_id:null,maxprice:{$max:"$price"}}})
< {
  _id: null,
  maxprice: 25
}
> db.sales.aggregate([
  {
    $group: {
      _id: "$item",
      maxQuantity: { $max:{multiply: ["$quantity","$price"]} }
    }
  }
])
< {
  _id: 'Cappuccino',
  maxQuantity: 170
}
{
  _id: 'Mochas',
  maxQuantity: 275
}
{
  _id: 'Americanos',
  maxQuantity: 210
}
{
  _id: 'Lattes',
  maxQuantity: 750
}

```

```

> db.sales.aggregate([
  {
    $sort: { quantity: -1 } // Sort by quantity in descending order
  },
  {
    $group: {
      _id: "$item",
      topQuantities: { $push: "$quantity" } // Push sorted quantities into array
    }
  },
  {
    $project: {
      secondMaxQuantity: { $arrayElemAt: ["$topQuantities", 1] } // Get second item in array
    }
  }
])
< {
  _id: 'Lattes',
  secondMaxQuantity: 25
}
{
  _id: 'Cappuccino',
  secondMaxQuantity: 17
}
{
  _id: 'Americanos',
  secondMaxQuantity: 21
}
{
  _id: 'Mochas'
}
> db.sales.createIndex({_id:1})
< _id_1
> db.sales.getIndexes()
< [ { v: 2, key: { _id: 1 }, name: '_id_' } ]
> db.users.find()
< {
  _id: ObjectId('6841a14d0433365212f288e4'),
  email: 'john@test.com',
  name: 'john'
}
{
  _id: ObjectId('6841a14d0433365212f288e5'),
  email: 'jane@test.com',
  name: 'jane'
}
> db.users.createIndex({email:1},{unique:true})
< email_1

```