

```
*****
INSERT
use employeedb2
switched to db employeedb2

employeedb2>
db.employeedb2.insertMany([{"id":106,name:"Anjali",age:19,address:"Pune",Salary:300000,department:"Marketing"}, {"id":105,name:"Anushka",age:20,address:"Sangli",Salary:35000,department:"HR"}, {"id":104,name:"Apurva",age:21,address:"Sangvi",Salary:40000,department:"Engineering"}, {"id":103,name:"Jyotsna",age:19,address:"Pimpri",Salary:20000,department:"HR"}, {"id":102,name:"Raj",age:21,address:"Pimpri",Salary:25000,department:"Marketing"}])
{
*****
*****
```

```
SHOW
db.employeedb2.find()
[
{
  _id: ObjectId('68e73e092d57d70cb5ba482d'),
  id: 106,
  name: 'Anjali',
  age: 19,
  address: 'Pune',
  Salary: 300000,
  department: 'Marketing'
},
{
  _id: ObjectId('68e73e092d57d70cb5ba482e'),
  id: 105,
  name: 'Anushka',
  age: 20,
  address: 'Sangli',
  Salary: 35000,
  department: 'HR'
},
{
  _id: ObjectId('68e73e092d57d70cb5ba482f'),
  id: 104,
  name: 'Apurva',
  age: 21,
  address: 'Sangvi',
  Salary: 40000,
  department: 'Engineering'
},
{
  _id: ObjectId('68e73e092d57d70cb5ba4830'),
  id: 103,
  name: 'Jyotsna',
  age: 19,
  address: 'Pimpri',
  Salary: 20000,
  department: 'HR'
},
{
  _id: ObjectId('68e73e092d57d70cb5ba4831'),
  id: 102,
  name: 'Raj',
  age: 21,
  address: 'Pimpri',
  Salary: 25000,
  department: 'Marketing'
}
]
```

```
*****
*****
```

```
SUM
db.employeedb2.aggregate([{$group:{_id:"$department",totalSalary:{$sum:"$Salary"}}}])
```

```

[
  { _id: 'Marketing', totalSalary: 325000 },
  { _id: 'HR', totalSalary: 55000 },
  { _id: 'Engineering', totalSalary: 40000 }
]
*****
*****
```

MAX SALARY

```
employeeedb2> db.employeeedb2.aggregate([ { $group: { _id: null, MaxSalary: { $max: "$Salary" } } } ] )
[ { _id: null, MaxSalary: 300000 } ]
*****
```

MIN SALARY

```
employeeedb2> db.employeeedb2.aggregate([ { $group: { _id: null, MinSalary: { $min: "$Salary" } } } ] )
[ { _id: null, MinSalary: 20000 } ]
*****
```

AVERAGE SALARY

```
employeeedb2> db.employeeedb2.aggregate([ { $group: { _id: null, averageSalary: { $avg: "$Salary" } } }, { $sort: { totalSalary: 1 } } ] )
[ { _id: null, averageSalary: 84000 } ]
*****
```

AVG SALARY ON BASIS OF DEPARTMENT

```
employeeedb2> db.employeeedb2.aggregate([ { $group: { _id: "$department", totalSalary: { $sum: "$Salary" } } }, { $sort: { totalSalary: 1 } } ] )
[
  { _id: 'Engineering', totalSalary: 40000 },
  { _id: 'HR', totalSalary: 55000 },
  { _id: 'Marketing', totalSalary: 325000 }
]
*****
```

COUNT

```
employeeedb2> db.employeeedb2.aggregate([ { $count: "totalemployee" } ])
[ { totalemployee: 5 } ]
*****
```

SORTING BY AGE

```
db.employeeedb2.find().sort({age:1})
[
  {
    _id: ObjectId('68e73e092d57d70cb5ba482d'),
    id: 106,
    name: 'Anjali',
    age: 19,
    address: 'Pune',
    Salary: 300000,
    department: 'Marketing'
  },
  {
    _id: ObjectId('68e73e092d57d70cb5ba4830'),
    id: 103,
    name: 'Jyotsna',
    age: 19,
    address: 'Pimpri',
    Salary: 20000,
  }
]
```

```

department: 'HR'
},
{
  _id: ObjectId('68e73e092d57d70cb5ba482e'),
  id: 105,
  name: 'Anushka',
  age: 20,
  address: 'Sangli',
  Salary: 35000,
  department: 'HR'
},
{
  _id: ObjectId('68e73e092d57d70cb5ba482f'),
  id: 104,
  name: 'Apurva',
  age: 21,
  address: 'Sangvi',
  Salary: 40000,
  department: 'Engineering'
},
{
  _id: ObjectId('68e73e092d57d70cb5ba4831'),
  id: 102,
  name: 'Raj',
  age: 21,
  address: 'Pimpri',
  Salary: 25000,
  department: 'Marketing'
}
]
*****

```

```

*****
INDEX
SINGLE INDEX

employeedb2> db.employeedb2.createIndex({ category: 1 })
category_1
employeedb2> db.employeedb2.getIndexes();
[
  { v: 2, key: { _id: 1 }, name: '_id' },
  { v: 2, key: { category: 1 }, name: 'category_1' }
]
*****
```

```

*****
COMPOUND INDEX
employeedb2> db.employeedb2.createIndex({category:1,Salary:-1})
category_1_Salary_-1
employeedb2> db.employeedb2.getIndexes();
[
  { v: 2, key: { _id: 1 }, name: '_id' },
  { v: 2, key: { category: 1 }, name: 'category_1' },
  {
    v: 2,
    key: { category: 1, Salary: -1 },
    name: 'category_1_Salary_-1'
  }
]
*****
```