
INSERT

use employeeedb2

switched to db employeeedb2

employeeedb2>

```
db.employeeedb2.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.employeeedb2.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.employeeedb2.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

```

employeeedb2> db.employeeedb2.createIndex({ category: 1 })
category_1
employeeedb2> db.employeeedb2.getIndexes();
[
  { v: 2, key: { _id: 1 }, name: '_id_' },
  { v: 2, key: { category: 1 }, name: 'category_1' }
]
*****

```

```

COMPOUND INDEX
employeeedb2> db.employeeedb2.createIndex({category:1,Salary:-1})
category_1_Salary_-1
employeeedb2> db.employeeedb2.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'
  }
]
*****

```