

```
// create db
use rvce;
```

```
// to check db
show dbs;
db.dropDatabase()
```

1) Insert minimum 5 employee records.

```
-----
// insert records for emp table
db.emp.insert({_eid : "E1001" , ename:"Durgesh" , socialno : "S1001" ,addr1 : "knp" , esal : 90000 ,
gender : "M" , emp_exp : 10})
db.emp.insert({_eid : "E1006" , ename:"Adity" , socialno : "S1006" ,addr1 : "Mum" , esal :750000 ,
gender : "M" , emp_exp : 12 })
db.emp.insert({_eid : "E1007" , ename:"Anurag" , socialno : "S1007" ,addr1 : "Knp" , esal :95000 ,
gender : "M" , emp_exp : 14})
db.emp.find().forEach(printjson)
```

```
// insert records for dept table
db.dept.insert({_dno : "D101" , dname:"IT" , mgid : db.emp.find()[0]._eid , mg_start_date : 2005})
db.dept.insert({_dno : "D106" , dname:"finance" , mgid : db.emp.find()[5]._eid , mg_start_date :
2019})
db.dept.insert({_dno : "D107" , dname:"finance" , mgid : db.emp.find()[6]._eid , mg_start_date :
2020})
db.dept.find().forEach(printjson)
```

```
// insert records for project table
db.proj.insert({_pid : "P101" , pname:"retail" , ploc : "Blr" , dno : db.dept.find()[0]._dno})
db.proj.insert({_pid : "P106" , pname:"private" , ploc : "Hyd" , dno : db.dept.find()[5]._dno})
db.proj.insert({_pid : "P107" , pname:"retail" , ploc : "Hyd" , dno : db.dept.find()[6]._dno})
db.dept.find().forEach(printjson)
```

```
// insert records for workson table
db.workson.insert({eid : db.emp.find()[0]._eid , pid : db.proj.find()[0]._pid })
db.workson.insert({eid : db.emp.find()[1]._eid , pid : db.proj.find()[1]._pid })
db.workson.insert({eid : db.emp.find()[6]._eid , pid : db.proj.find()[6]._pid })
db.workson.find().forEach(printjson)
```

```
1.// display record
db.emp.find().pretty()
```

```
> db.emp.find().pretty()
{
  "_id" : ObjectId("613c8598d81a2620f7ebd193"),
  "_eid" : "E1001",
  "ename" : "Durgesh",
  "socialno" : "S1001",
  "addr1" : "knp",
  "esal" : 90000,
  "gender" : "M",
  "emp_exp" : 10
}

{
  "_id" : ObjectId("613c8598d81a2620f7ebd197"),
  "_eid" : "E1006",
  "ename" : "Adity",
  "socialno" : "S1006",
  "addr1" : "Mum",
  "esal" : 750000,
  "gender" : "M",
  "emp_exp" : 12
}

{
  "_id" : ObjectId("613c8598d81a2620f7ebd198"),
  "_eid" : "E1007",
  "ename" : "Anurag",
  "socialno" : "S1007",
  "addr1" : "Knp",
  "esal" : 95000,
  "gender" : "M",
  "emp_exp" : 14
}
```

2) Sort the employee list by SSN

```
-----
// ascending order
db.emp.find().sort({socialno:-1})

// descending order
db.emp.find().sort({socialno:-1})
```

```
> db.emp.find().sort({socialno:-1})
{ "_id" : ObjectId("613c8598d81a2620f7ebd198"), "_eid" : "E1007", "ename" : "Anurag", "socialno" : "S1007", "addr1" : "Knp", "esal" : 95000, "gender" : "M", "emp_exp" : 14 }
{ "_id" : ObjectId("613c8598d81a2620f7ebd197"), "_eid" : "E1006", "ename" : "Adity", "socialno" : "S1006", "addr1" : "Mum", "esal" : 750000, "gender" : "M", "emp_exp" : 12 }
{ "_id" : ObjectId("613c8598d81a2620f7ebd193"), "_eid" : "E1001", "ename" : "Durgesh", "socialno" : "S1001", "addr1" : "knp", "esal" : 90000, "gender" : "M", "emp_exp" : 10 }
>
> db.emp.find().sort({socialno:-1})
{ "_id" : ObjectId("613c8598d81a2620f7ebd198"), "_eid" : "E1007", "ename" : "Anurag", "socialno" : "S1007", "addr1" : "Knp", "esal" : 95000, "gender" : "M", "emp_exp" : 14 }
{ "_id" : ObjectId("613c8598d81a2620f7ebd197"), "_eid" : "E1006", "ename" : "Adity", "socialno" : "S1006", "addr1" : "Mum", "esal" : 750000, "gender" : "M", "emp_exp" : 12 }
{ "_id" : ObjectId("613c8598d81a2620f7ebd193"), "_eid" : "E1001", "ename" : "Durgesh", "socialno" : "S1001", "addr1" : "knp", "esal" : 90000, "gender" : "M", "emp_exp" : 10 }
>
```

3) List the employees who are working in the finance department

>db.employee.find({department:"finance"}).forEach(printjson);

```
db.employee.find().pretty();
{
  "_id" : ObjectId("613da9f5de9ccd88df2451cc"),
  "ssn" : 123,
  "name" : "vishwas",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,
  "experiance" : 20
}
{
  "_id" : ObjectId("613da9fede9ccd88df2451cd"),
  "ssn" : 123,
  "name" : "vishwas",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,
  "experiance" : 20
}
{
  "_id" : ObjectId("613daa17de9ccd88df2451ce"),
  "ssn" : 123,
  "name" : "vishwas",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,
  "experiance" : 20
}
{
  "_id" : ObjectId("613daa88de9ccd88df2451cf"),
  "ssn" : 123,
  "name" : "vishwas",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,
  "experiance" : 20
}
{
  "_id" : ObjectId("613daa92de9ccd88df2451d0"),
  "ssn" : 124,
  "name" : "nehash",
  "department" : "banking",
  "salary" : 3000,
  "projects" : 4,
  "experiance" : 10
}
{
  "_id" : ObjectId("613daa9ade9ccd88df2451d1"),
  "ssn" : 125,
  "name" : "tjes",
  "department" : "accounts",
}
{
  "_id" : ObjectId("613daaa1de9ccd88df2451d2"),
  "ssn" : 126,
  "name" : "akash",
  "department" : "finance",
  "salary" : 5000,
  "project" : 5,
  "experiance" : 12,
  "awarded" : "employee of year"
}
{
  "_id" : ObjectId("613daaa8de9ccd88df2451d3"),
  "ssn" : 127,
  "name" : "sanjay",
  "department" : "stockbroker",
  "salary" : 1000,
  "projects" : 3,
  "experiance" : 11
}
{
  "_id" : ObjectId("614058e85dcd2241f6ce0c20"),
  "ssn" : 123,
  "name" : "Suman",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,
  "experiance" : 20
}
{
  "_id" : ObjectId("614058ef5dcd2241f6ce0c21"),
  "ssn" : 124,
  "name" : "Ravi",
  "department" : "banking",
  "salary" : 3000,
  "projects" : 4,
  "experiance" : 10
}
{
  "_id" : ObjectId("614058f65dcd2241f6ce0c22"),
  "ssn" : 125,
  "name" : "Deepak",
  "department" : "accounts",
  "salary" : 4000,
}
```

```

{
  "_id" : ObjectId("614058fd5dcd2241f6ce0c23"),
  "ssn" : 126,
  "name" : "Prince",
  "department" : "finance",
  "salary" : 5000,
  "project" : 5,
  "experience" : 12
}
{
  "_id" : ObjectId("614059035dcd2241f6ce0c24"),
  "ssn" : 127,
  "name" : "sanjay",
  "department" : "stockbroker",
  "salary" : 1000,
  "projects" : 3,
  "experience" : 11
}
> db.employee.find({department:"finance"}).forEach(printjson)
{
  "_id" : ObjectId("613da9f5de9ccd88df2451cc"),
  "ssn" : 123,
  "name" : "vishwas",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,
  "experience" : 20
}
{
  "_id" : ObjectId("613da9fede9ccd88df2451cd"),
  "ssn" : 123,
  "name" : "vishwas",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,
  "experience" : 20
}
{
  "_id" : ObjectId("613daa17de9ccd88df2451ce"),
  "ssn" : 123,
  "name" : "vishwas",
  "department" : "finance",
  "salary" : 2000,
  "projects" : 2,

```

```

    "projects" : 2,
    "experience" : 20
  }
  {
    "_id" : ObjectId("613daa88de9ccd88df2451cf"),
    "ssn" : 123,
    "name" : "vishwas",
    "department" : "finance",
    "salary" : 2000,
    "projects" : 2,
    "experience" : 20
  }
  {
    "_id" : ObjectId("613daaa1de9ccd88df2451d2"),
    "ssn" : 126,
    "name" : "akash",
    "department" : "finance",
    "salary" : 5000,
    "project" : 5,
    "experience" : 12,
    "awarded" : "employee of year"
  }
  {
    "_id" : ObjectId("614058e85dcd2241f6ce0c20"),
    "ssn" : 123,
    "name" : "Suman",
    "department" : "finance",
    "salary" : 2000,
    "projects" : 2,
    "experience" : 20
  }
  {
    "_id" : ObjectId("614058fd5dcd2241f6ce0c23"),
    "ssn" : 126,
    "name" : "Prince",
    "department" : "finance",
    "salary" : 5000,
    "project" : 5,
    "experience" : 12
  }
}
> _

```

4) Find the employee who draws the maximum salary.

```

// to get highest salary
db.emp.find({}).sort({"esal":-1}).limit(1)

```

```

// second highest salary
db.emp.find({}).sort({"esal":-1}).skip(1).limit(1)

```

```

> db.emp.find({}).sort({"esal":-1}).limit(1)
{ "_id" : ObjectId("613c8598d81a2620f7ebd197"), "_eid" : "E1006", "ename" : "Aditya", "socialno" : "S1006", "addr1" : "Mum", "esal" : 750000, "gender" : "M", "emp_exp" : 12 }

```

5) Update the record of the employee who has worked on maximum projects as “employee of the year”

```

> db.employee.update({project:5},{set:{awarded:"employee of year"}})
>
> db.employee.update({project:5},{set:{awarded:"employee of year"}})
WriteResult({ "nMatched" : 1, "nUpserted" : 0, "nModified" : 0 })
>

```

6) Delete employee records who have minimum experience

db.emp.remove({emp_exp: db.emp.find().sort({emp_exp:1})[0].emp_exp})

```
> db.emp.find().pretty()
{
  "_id" : ObjectId("613c8598d81a2620f7ebd193"),
  "_eid" : "E1001",
  "ename" : "Durgesh",
  "socialno" : "S1001",
  "addr1" : "knp",
  "esal" : 90000,
  "gender" : "M",
  "emp_exp" : 10
}
{
  "_id" : ObjectId("613c8598d81a2620f7ebd197"),
  "_eid" : "E1006",
  "ename" : "Adity",
  "socialno" : "S1006",
  "addr1" : "Mum",
  "esal" : 750000,
  "gender" : "M",
  "emp_exp" : 12
}
{
  "_id" : ObjectId("613c8598d81a2620f7ebd198"),
  "_eid" : "E1007",
  "ename" : "Anurag",
  "socialno" : "S1007",
  "addr1" : "Knp",
  "esal" : 95000,
  "gender" : "M",
  "emp_exp" : 14
}

> db.emp.remove({emp_exp: db.emp.find().sort({emp_exp:1})[0].emp_exp})
WriteResult({ "nRemoved" : 1 })
> db.emp.find().pretty()
{
  "_id" : ObjectId("613c8598d81a2620f7ebd197"),
  "_eid" : "E1006",
  "ename" : "Adity",
  "socialno" : "S1006",
  "addr1" : "Mum",
  "esal" : 750000,
  "gender" : "M",
  "emp_exp" : 12
}
{
  "_id" : ObjectId("613c8598d81a2620f7ebd198"),
  "_eid" : "E1007",
  "ename" : "Anurag",
  "socialno" : "S1007",
  "addr1" : "Knp",
  "esal" : 95000,
  "gender" : "M",
  "emp_exp" : 14
}
```