

### Sort using comparable

emp obj  
id  
name  
salary

class Employee implements Comparable

public int compareTo(Employee obj)

return this.id - obj.id (Asc)  
obj.id - this.id (desc)  
this.name - obj.name (asc)

### Sort using comparator

class EmpComparator implements Comparator<Employee>

public int compare(Employee e1, Employee e2)

if (e1.id < e2.id) {  
return -1;  
} else if (e1.id > e2.id) {  
return 1;  
} else {  
return 0;  
}

TreeSet -> compareTo(obj)  
String (ok)  
StringBuffer (x)

Collections.sort(empList, new EmpComparator());  
list.sort(new EmpComparator());

Sort by ternary operator -> condition ? V1 : V2  
T return V1  
F return V2

return e1.id < e2.id ? -1 : e1.id > e2.id ? 1 : 0;

If two name is equal then sort the employee using salary in desc

```
int compare (Emp e1, Emp e2) {  
    if (e1.name.equals(e2.name)) {  
        return e1.salary < e2.salary ? 1 : e1.salary > e2.salary ? -1 : 0;  
    } else {  
        return e2.compareTo(e1); // name descending order.  
    }  
    return 0;  
}
```

### using stream

overriding compare method of comparator using lambda.

list.stream().sorted((o1, o2) -> o1.salary < o2.salary ? 1 : o1.salary > o2.salary ? -1 : 0).collect(Collectors.toList());

it will return list of employee using salary desc

ASC ->