```
package demoEmployee;
import java.io.File;
import java.io.Serializable;

public class empl implements Serializable {
         int empno;
         String ename;
         int  salary;

         empl(int empno, String ename, int salary ){
                 this.empno=empno;
                 this.ename=ename;
                 this.salary=salary;
         }
         public String toString() {
                 return empno+" "+ename+" "+salary;

         }
        }

public class testEmp {
        public static void main(String[] args) throws Exception {
                int choice = -1;

                Scanner s= new Scanner(System.in);
                Scanner s1= new Scanner(System.in);
                File file = new File("employee.txt");
                ArrayList<empl>al= new ArrayList<empl>();
                ObjectOutputStream oos = null;
                ObjectInputStream ois = null;
                ListIterator li = null;

                if(file.isFile()) {
                        ois= new ObjectInputStream(new FileInputStream(file));
                        al=(ArrayList<empl>)ois.readObject();
                        ois.close();
                }
```

```
    do {
    System.out.println("1. INSERT");
    System.out.println("2. DISPLAY");
    System.out.println("3.SEARCH");
    System.out.println("4.DELETE");
    System.out.println("5.UPDATE");
    System.out.println("6.SORT By EmpNo - On screen");
    System.out.println("7.SORT By EmpNo - In File");
    System.out.println("0. EXIT");
    System.out.println("Enter your choice : ");
choice = s.nextInt();

    switch (choice) {
    case 1:
            System.out.println("how many employees you want : ");
    int n = s.nextInt();
    for (int i=0; i<n; i++){

            System.out.print("enter employee No. : ");
            int empno = s.nextInt();

            System.out.print("enter employee name : ");
            String ename = s1.nextLine();

            System.out.print("enter employee salary : ");
            int salary = s.nextInt();

            al.add(new empl( empno,ename,salary));

    }
    oos=new ObjectOutputStream(new FileOutputStream(file));
    oos.writeObject(al);
    oos.close();
    break;
```

```
case 2:
        if(file.isFile()) {
                ois= new ObjectInputStream(new FileInputStream(file));
                al=(ArrayList<empl>)ois.readObject();
                ois.close();

        System.out.println("-------------------------------------------------------");
        li=al.listIterator();

        while(li.hasNext())
                System.out.println(li.next());
        System.out.println("-------------------------------------------------------");
        }else {
                System.out.println("File not Exists...!");
        }
        break;

case 3:

        if(file.isFile()) {
                ois= new ObjectInputStream(new FileInputStream(file));
                al=(ArrayList<empl>)ois.readObject();
                ois.close();

                boolean found = false;
                System.out.println("enter employee no. to search : ");
        int     empno = s.nextInt();
                System.out.println("-------------------------------------------------------------");
        li=al.listIterator();

        while(li.hasNext()) {
                empl e= (empl)li.next();
                if(e.empno ==empno) {

                System.out.println(e);
                found = true;
                }
        }if(!found)
                System.out.println("Record not found...!");
        System.out.println("-------------------------------------------------------");
        }else {
                System.out.println("File not Exists...!");
        }
        break;
```

```
case 4:

                if(file.isFile()) {
                        ois= new ObjectInputStream(new FileInputStream(file));
                        al=(ArrayList<empl>)ois.readObject();
                        ois.close();

                        boolean found = false;
                        System.out.print("enter employee no. to delete : ");
                int     empno = s.nextInt();
                        System.out.println("------------------------------------------------------------");
                li=al.listIterator();

                while(li.hasNext()) {
                        empl e= (empl)li.next();
                        if(e.empno ==empno) {

                        li.remove();
                        found = true;
                        }
                }if(found) {
                        oos = new ObjectOutputStream(new FileOutputStream(file));
                oos.writeObject(al);
                oos.close();

                System.out.println("Record deleted successfully....!");
                }
                else {
                        System.out.println("Record not found...!");
                }
                System.out.println("------------------------------------------------------------");
                }else {
                        System.out.println("File not Exists...!");
                }
                break;
```

```
case 5:

                if(file.isFile()) {
                        ois= new ObjectInputStream(new FileInputStream(file));
                        al=(ArrayList<empl>)ois.readObject();
                        ois.close();

                        boolean found = false;
                        System.out.print("enter employee no. to Update : ");
                int     empno = s.nextInt();
                        System.out.println("------------------------------------------------------------");
                li=al.listIterator();

                while(li.hasNext()) {
                        empl e= (empl)li.next();
                        if(e.empno ==empno) {

             System.out.print("Enter new name : ");
             String ename = s1.nextLine();

             System.out.print("Enter new salary : ");
            int salary = s.nextInt();

            li.set(new empl(empno,ename,salary));
             found = true;
                        }
                }if(found) {
                        oos = new ObjectOutputStream(new FileOutputStream(file));
                    oos.writeObject(al);
                    oos.close();
                System.out.println("Record is updated successfully...!");
                }else {
                        System.out.println("Record not found...!");

                }
                System.out.println("------------------------------------------------------------");
                }else {
                        System.out.println("File not Exists...!");
                }
                break;
```

```
case 6:
	if(file.isFile()) {
		ois= new ObjectInputStream(new FileInputStream(file));
		al=(ArrayList<empl>)ois.readObject();
		ois.close();

		Collections.sort(al,new Comparator<empl>() {
			public int compare(empl e1,empl e2) {
				return e1.empno-e2.empno;
			}
		});
	System.out.println("-----------------------------------------------------");
	li=al.listIterator();

	while(li.hasNext())
		System.out.println(li.next());
	System.out.println("-----------------------------------------------------");
	}else {
		System.out.println("File not Exists...!");
	}
	break;
```

```
	case 7:
		if(file.isFile()) {
			ois= new ObjectInputStream(new FileInputStream(file));
			al=(ArrayList<empl>)ois.readObject();
			ois.close();

			Collections.sort(al,new Comparator<empl>() {
				public int compare(empl e1,empl e2) {
					return e1.empno-e2.empno;
				}
			});

			oos= new ObjectOutputStream(new FileOutputStream(file));
			oos.writeObject(al);
			oos.close();

		System.out.println("-----------------------------------------------------");
		li=al.listIterator();

		while(li.hasNext())
			System.out.println(li.next());
		System.out.println("-----------------------------------------------------");
		}else {
			System.out.println("File not Exists...!");
		}
		break;
		}
		}


		while(choice!=0);
	}
}
```