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Project Name : Collection Framework

1) ArrayList

```
import java.util.ArrayList;
import java.util.Collection;
import java.util.Collections;
import java.util.Iterator;
import java.util.List;

public class Employee_demo {

	public static void main(String[] args) {
		List<Employee> employees = new ArrayList<Employee>();
		Employee emps = new Employee(201, "Din ", 202.12f);
		employees.add(emps);
		employees.add(new Employee(202, "Raj ", 254.01f));
		employees.add(new Employee(203, "Gops", 25410.01f));
		employees.add(new Employee(204, "Rakesh ", 25414.01f));
		System.out.println(employees);
		Iterator it = employees.listIterator();
		while (it.hasNext()) {
			Employee emp = (Employee) it.next();
			System.out.println(emp.getEmpId() + "\t " + emp.getName() + " \t" +
emp.getSalary());
		}
		ArrayList<String> a1 = new ArrayList<String>();
		for (int i = 0; i < employees.size(); i++) {
			Employee emp1 = employees.get(i);
			String name = emp1.getName();
			a1.add(name);
		}
		Collections.sort(a1);
		System.out.println(a1);
		Collections.reverse(a1);
		System.out.println(a1);

		ArrayList<Integer> a2 = new ArrayList<Integer>();
		for (int i = 0; i < employees.size(); i++) {
			Employee emp1 = employees.get(i);
			int empId = emp1.getEmpId();
			a2.add(empId);
		}
		Collections.sort(a2);
		System.out.println(a2);
		Collections.reverse(a2);
		System.out.println(a2);
	}
}
```

Output :

```
[Employee [empId=201, name=Din , salary=202.12], Employee [empId=202, name=Raj , salary=254.01], Employee [empId=203, name=Gops, salary=25410.01], Employee [empId=204, name=Rakesh , salary=25414.01]]
201	Din	202.12
202	Raj	254.01
203	Gops	25410.01
204	Rakesh	25414.01
[Din , Gops, Raj , Rakesh ]
[Rakesh , Raj , Gops, Din ]
[201, 202, 203, 204]
[204, 203, 202, 201]
```

```
public class Employee {
	private int empId;
	private String name;
	private float salary;

	public Employee() {

	}

	public Employee(int empId, String name, float salary) {
		super();
		this.empId = empId;
		this.name = name;
		this.salary = salary;
	}

	public int getEmpId() {
		return empId;
	}

	public void setEmpId(int empId) {
		this.empId = empId;
	}

	public String getName() {
		return name;
	}
```

```
	public void setName(String name) {
		this.name = name;
	}

	public float getSalary() {
		return salary;
	}

	public void setSalary(float salary) {
		this.salary = salary;
	}

	@Override
	public String toString() {
		return "Employee [empId=" + empId + ", name=" + name + ",
salary=" + salary + "]";
	}

}
```

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2) LinkedList :

```
import java.util.LinkedList;
import java.util.List;
public class Collection_demo03 {

	public static void main(String[] args) {
	LinkedList<String> list = new LinkedList<String>();
	list.add("Nanded");
	list.add("Pune");
	list.add("Nagpur");
	list.add("Mumbai");
	System.out.println(list);
	list.add(4, "Goa");
	System.out.println(list);
```

```
        }

}
```

Output :

```
[Nanded, Pune, Nagpur, Mumbai]
[Nanded, Pune, Nagpur, Mumbai, Goa]
```