LinkedList

LinkedList is a class which implements List and Queue Interface
It belongs to java.util package.

Characteristics
Maintain Insertion.
Iteration order is predictable.
Dynamically growable or shrinkable.
Accepts duplicate objects.
Can store both homogeneous as well as heterogeneous objects.
Its dataStructure is Doubly LinkedList.
It contains 2 constructors.

LinkedList specific methods
addFirst(Object ref)
addLast(Object ref)
getFirst()
getLast()
removeFirst()
removeLast()

ex:-

```
public class CollFramework {
	public static void main(String[] args) {
		LinkedList <Integer>l=new LinkedList();
		l.add(1);
		l.addFirst(6);
		l.addLast(10);
		l.add(2, 3);
		for(int i=0;i<l.size();i++) {
			System.out.println(l.get(i));
		}
		System.out.println("------------------");
		System.out.println(l.getFirst());  //6
		System.out.println(l.getLast());  //10
		l.removeFirst();
		l.removeLast();
		System.out.println(l); //[1,3]

	}
}
```

ex2:-

```
public class CollFrameWork {
	public static void main(String[] args) {
```

```
                LinkedList a=new LinkedList<>();
                a.add(1);
                a.add('a');
                a.add("Testyantra");
                a.add(0.11);
                LinkedList a1=new LinkedList(a);
                a1.add(1);
                a1.add('a');
                a1.add(0.11);
                a1.add("s");
                System.out.println(a1);
        }
}
```

Differences between ArrayList and LinkedList

Array List	Linked List
Default size of ArrayList is 10	Default size of ArrayList is 0
It's Data structure is growable size array	It's Data structure is doubly LinkedList
It is good, if our operation is retrieval.	It is good, if our operation is insertion and deletion.
While adding data in middle, ArrayList is slower	LinkedList is faster, when we add object in middle.