

Collections of java as follows:-

12/08/24

ArrayList = An Array list is resizable array implementation.

```
import java.util.*;
```

```
class ArrayList ex {
```

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

```
        ArrayList <String> List = new ArrayList <> ();
```

```
        List.add ("Apple");
```

```
        List.add ("Banana");
```

```
        List.add ("Cherry");
```

```
        System.out.println (List);
```

```
    }
```

```
}  
Output = [Apple, Banana, Cherry]
```

Linked List =

A Linked list is a doubly linked list implementation of list interface.

Program =

```
import java.util.*;
```

```
class Linked list ex {
```

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

```
        Linked List <String> List = new Linked List <> ();
```

```
        List.add ("Apple");
```

```
        List.add ("Cherry");
```

```
    }
```

Output = [Apple, Cherry]

Hash set = A Hash set is a set implementation that uses a hash table for storage.

Code:-

```
import java.util.*;
```

```
class HashSet ex {
```

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

```
        HashSet <String> set = new HashSet <> ();
```

```
        set.add ("Apple");
```

```
        set.add ("Ice Cream");
```

```
        System.out.println (set);
```

```
    } }
```

Output = [Apple, Ice Cream]

Tree set = A Tree set is a set implementation that uses a tree for storage.

Code:-

```
import java.util.*;
```

```
class TreeSet ex {
```

```
    public static void main (String Args[]) {
```

```
        TreeSet <String> set = new TreeSet <> ();
```

```
        set.add ("Apple");
```

```

    set.add("Banana");
    set.add("Cherry");
    System.out.println(set);
}
}

```

output = [Apple, Banana, Cherry]

HashMap = a Map Implementation that uses a hash table for storage.

```

import java.util.*;
class HashMap ex {
    public static void main (String args[]) {
        HashMap < String, Integer > map = new HashMap < > ();
        map.put ("Apple", 1);
        map.put ("Banana", 2);
        map.put ("Cherry", 3);
        System.out.println (map);
    }
}

```

put = { Apple = 1, Banana = 2, Cherry = 3 }

Tree Map = A 'Tree Map' is a map implementation that uses a tree for storage.

```

import java.util.*;
class Tree map ex {

```

8) Priority Queue. A Priority Queue is a Queue Implementation that orders Elements Based on their natural ordering or a Custom Comparator.

Code =

```
import java.util.*;
```

```
class Priority Queue ex {
```

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

```
        Priority Queue <String> Queue = new Priority Queue <>();
```

```
        Queue.add ("Apple");
```

```
        Queue.add ("Banana");
```

```
        Queue.add ("cherry");
```

```
        System.out.println (Queue);
```

```
    }
```

output = [Apple, Banana, Cherry].

Array Dequeue =

An Array Dequeue is a Dequeue implementation that uses an array for storage.

Code = import java.util.*;

```
class Array Dequeue ex {
```

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

```
        Array Dequeue <String> dequeue = new Array Dequeue <>();
```

```
        dequeue.add ("Apple");
```



```
dequeue.add("Banana");  
system.out.println(dequeue);
```

```
}  
}
```

output = [Apple, Banana].

stack = LIFO Implementation of the list Interface.

Code =

```
import java.util.*;  
class Stack ex {  
    public static void main (String args[]) {  
        Stack <String> stack = new Stack <> ();  
        stack.push("Apple");  
        stack.push("Banana");  
        stack.push("Cherry");  
        System.out.println(stack);
```

```
}  
}
```

output = [Apple, Banana, Cherry].

vector = A vector is a synchronized implementation of the list Interface.

code =

```
import java.util.*;  
class vector ex {  
    public static void main (String args []) {  
        Vector < String > vector = new Vector < > ();  
        vector.add ("Apple");  
        vector.add ("Custard Apple");  
        System.out.println (vector);  
    }  
}
```

output =

[Apple, Custard Apple].