

```
1 class NitCollection{
2     private Object[] objArray=new Object[10];
3     private int index=0;
4
5     public void add(Object obj) {
6
7         if(size()==capacity()){
8             increaseCapacity();
9         }
10
11         objArray[index]=obj;
12         index++;
13     }
14
15     void increaseCapacity () {
16         Object [] nextArray = new Object [capacity()*2];
17
18         for (int i=0; i<objArray.length; i++) {
19             nextArray [i]=objArray[i];
20         }
21
22         objArray=nextArray;
23     }
24
25     int size() {
26         return index;
27     }
28
29     int capacity ()
30     {
31         return objArray.length;
32     }
33 }
34
35 class TestNITCollection {
```

```
36     public static void main(String[] args) {
37         NitCollection nc1=new NitCollection();
38
39         System.out.println("capacity : "+nc1.capacity());
40         System.out.println("capacity : "+nc1.size());
41         nc1.add("a");
42
43         System.out.println("capacity : "+nc1.capacity());
44         System.out.println("capacity : "+nc1.size());
45         nc1.add("b");
46
47         System.out.println("capacity : "+nc1.capacity());
48         System.out.println("capacity : "+nc1.size());
49         nc1.add("c");
50
51         System.out.println("capacity : "+nc1.capacity());
52         System.out.println("capacity : "+nc1.size());
53         nc1.add("d");
54
55         System.out.println("capacity : "+nc1.capacity());
56         System.out.println("capacity : "+nc1.size());
57         nc1.add("e");
58
59         System.out.println("capacity : "+nc1.capacity());
60         System.out.println("capacity : "+nc1.size());
61         nc1.add("f");
62
63         System.out.println("capacity : "+nc1.capacity());
64         System.out.println("capacity : "+nc1.size());
65         nc1.add("g");
66
67         System.out.println("capacity : "+nc1.capacity());
68         System.out.println("capacity : "+nc1.size());
69         nc1.add("h");
70
```

```
71      System.out.println("capacity : "+nc1.capacity());
72      System.out.println("capacity : "+nc1.size());
73      nc1.add("i");
74
75      System.out.println("capacity : "+nc1.capacity());
76      System.out.println("capacity : "+nc1.size());
77      nc1.add("j");
78
79      System.out.println("capacity : "+nc1.capacity());
80      System.out.println("capacity : "+nc1.size());
81      nc1.add("k");
82
83      System.out.println("capacity : "+nc1.capacity());
84      System.out.println("capacity : "+nc1.size());
85      nc1.add("l");
86
87      System.out.println("capacity : "+nc1.capacity());
88      System.out.println("capacity : "+nc1.size());
89      nc1.add("m");
90
91      System.out.println("capacity : "+nc1.capacity());
92      System.out.println("capacity : "+nc1.size());
93      nc1.add("n");
94
95      System.out.println("capacity : "+nc1.capacity());
96      System.out.println("capacity : "+nc1.size());
97      nc1.add("o");
98  }
99 }
```