

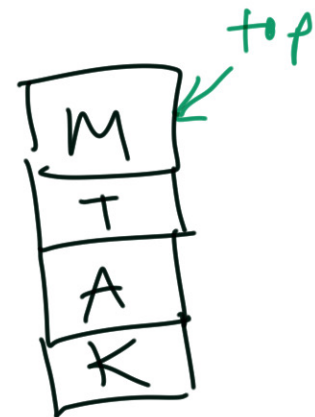
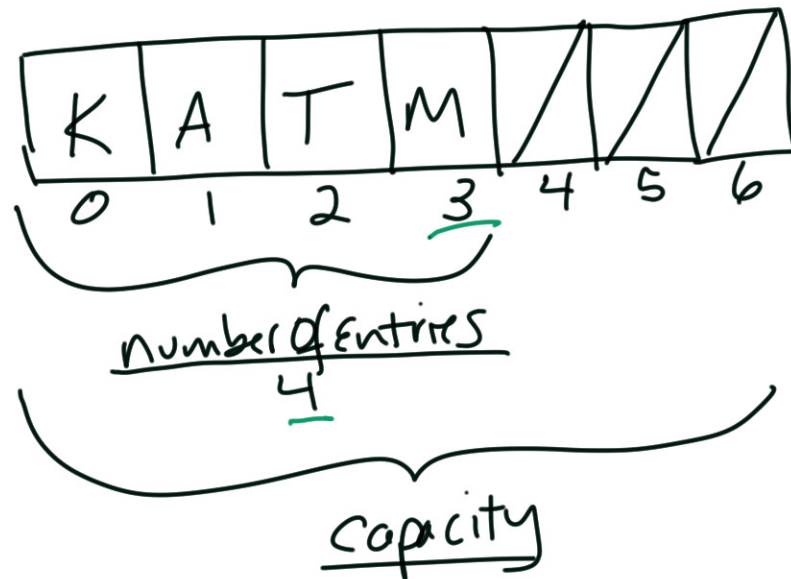
```

12 public class ArrayBasedStack<T> implements StackInterface<T>
13 {
14
15     private T[] contents;
16     private int numberOfEntries;
17     private int capacity;
18
19     /**
20      * Create a new ArrayBasedStack object.
21      * @param stackLen initial capacity
22      */
23     @SuppressWarnings("unchecked")
24     public ArrayBasedStack(int stackLen)
25     {
26         capacity = stackLen;
27         numberOfEntries = 0;
28         contents = (T[]) new Object[capacity];
29     }
30
31     /**
32      * this is the default constructor
33      */
34     public ArrayBasedStack()
35     {
36         this(100);
37     }
38
39     /**@inheritDoc***/
40     @Override
41     public boolean isEmpty()
42     {
43         return (numberOfEntries == 0);
44     }
45

```

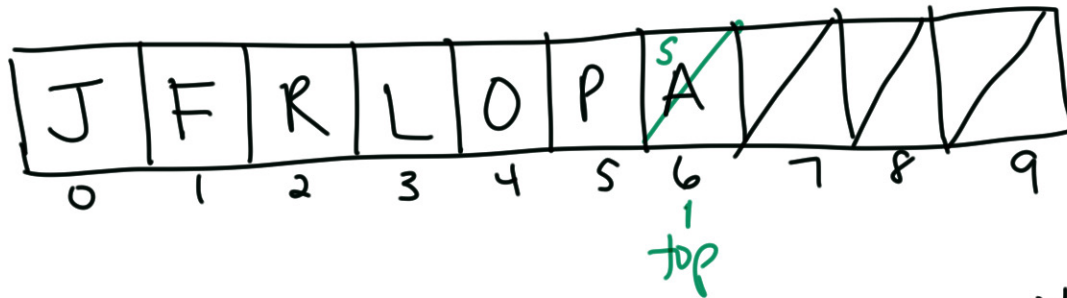
Stack Array-Based Implementation

contents



The item at the ⁷top of the stack is indexed by $(\text{number of entries} - 1)$

contents



peek() returns A

pop() returns A

push(s)

capacity
10

number of entries

7

6

7