

1. What is the time complexity of searching elements in a stack?
 - A. $O(1)$
 - B. $O(n)$
 - C. $O(\log n)$
 - D. $O(n^2)$
2. What action does Python take when a list used as a stack reaches its capacity?
 - A. Python automatically increases the capacity of the list without reallocating memory.
 - B. Python deallocates memory from the beginning of the list to accommodate new elements.
 - C. Python relocates the entire list to a new memory location with increased capacity and copies all existing elements.
 - D. Python raises an error and prevents further addition of elements to the list.
3. Consider the following list:

What will be the output when the `s.pop()` method is called twice consecutively?

```
s = []  
s.append('https://www.cnn.com/')  
s.append('https://www.cnn.com/world')  
s.append('https://www.cnn.com/india')  
s.append('https://www.cnn.com/china')
```

- A. <https://www.cnn.com/india>, <https://www.cnn.com/china>
 - B. <https://www.cnn.com/world>, <https://www.cnn.com/china>
 - C. <https://www.cnn.com/>, <https://www.cnn.com/world>
 - D. <https://www.cnn.com/china>, <https://www.cnn.com/india>
4. What does the acronym LIFO stand for in the context of a stack data structure?
 - A. Last in, first out
 - B. Last in, first accessed

- C. Last input, first output
- D. Last input, first accessed

5. Which Python module is recommended for implementing a stack due to its efficient performance?
- A. array
 - B. deque from collections
 - C. list
 - D. stack from queue