

1. What is the main characteristic of a stack data structure?
 - A. First in, first out (FIFO)
 - B. Last in, first out (LIFO)
 - C. Random access
 - D. Circular access

2. In the context of a web browser's history, how is the stack utilized?
 - A. By maintaining links in alphabetical order
 - B. By storing links in random order
 - C. By keeping track of visited links in chronological order
 - D. By storing links based on frequency of visitation

3. Which data structure is NOT recommended for implementing a stack in Python due to potential performance issues?
 - A. Linked list
 - B. Array
 - C. Deque
 - D. Dictionary

4. What is the time complexity of pushing and popping elements in a stack?
 - A. $O(1)$
 - B. $O(n)$
 - C. $O(\log n)$
 - D. $O(n^2)$

5. Consider the following list:

What will be the result of executing `s.pop()`?

```
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/>
- B. <https://www.cnn.com/world>
- C. <https://www.cnn.com/india>
- D. <https://www.cnn.com/china>