HackerRank For Work

Info6205_Summer18_Quiz3 35 minutes

Question - 1

SCORE: **5 points**

Stack

Which Data-Structure is more apt for implementing Stack?

- ( ) Array
- (•) LinkedList
- ( ) Vector
- ( ) HashMap

Question - 2

SCORE: **5 points**

Linked-List

What is the time complexity to count the number of elements in the linked list?

- ( ) O(1)
- (•) O(N)
- ( ) O(log N)
- ( ) None of the mentioned

Question - 3

SCORE: **10 points**

Evaluate the following:

Evaluate the following reverse polish notation: 1 2 3 + 4 5 * * + 2 10 15 + * + 1 17 2 5 4 + * + + -

Question - 4

SCORE: **30 points**

Dijkstra Two-Stack algorithm

Your task is to implement the push, pop and peek methods for a stack to be used to solve the Dijkstra Two-Stack algorithm. A general grow method is available to you. This grows the stack when the stack is full. You will also have certain helper methods to check whether the stack is full or empty and a method which returns the size of the array.

You are **NOT** allowed to change anything else. Just complete the TODOs and implement the Push,Pop and Peek method.
Remember, if you have any questions or doubts, ask us.