Chongqing University of Technology

Subject: Data Structure and Algorithm

Instructor: Henry

Assignment 03

1. Implementation of Stack using Array List

Following String Elements Liam, Noah, Ames, Oliver, Benjamin, Lucas, Mason, Jacob, Michael, Daniel, Jackson, Aiden, Matthew.

- int size (): Return the size (number of items) in this Stack Array List.
- boolean isEmpty(): Return true if this Stack Array List has no items. (This is the same as the size equal to zero.) Return false if the size is greater than zero.
- void push(E value): Add the given element, value, to the end of the list
- String pop():To pop the top Object from the Stack
- String peek():To view the Top Object. This will not modify the Stack.

2. Implementation of Stack using Linked List

Following String Elements Liam, Noah, Ames, Oliver, Benjamin, Lucas, Mason, Jacob, Michael, Daniel, Jackson, Aiden, Matthew.

- void push (E value): Add the given element, value, to the end of the list.
- boolean isEmpty(): Return true if this Stack Linked List has no items. (This is the same as the size equal to zero.) Return false if the size is greater than zero.
- String peek():To view the Top Object . This will not modify the Stack
- String pop():Delete top element of Stack
- Void Display (): Display all the Elements.

** NOTICE**

- 1. Test your code in main method.
- 2. your code will have in two projects named StackArray_List, and StackLinked_List make it zip and send it to akabillah4420@gmail.com don't forget to write student id the subject name in your main folder "Assignment_3" in the mail. And be sure that your code has received by replying okay
- 3. Don't copy

Deadline: 21 October 12:00 am BD time and 2:00 pm China time (Thanks)