Name: _____

CSCE 146 Program2 (Ch6) Java Program: Stack

Setup

1. Existing interfaces or abstract classes (like java.util.Stack) will not be implemented for this assignment
2. Use of code that implements a list from the program1 assignment or the Ch3 code on Blackboard

Program

1. **Stack Methods.** Your stack should have the following methods (handle out of bound index inputs) (Ch6 slides4-7):
    a. Stack() //default constructor, size=0
    b. push(int element) //add element at top of stack and increase size of the stack by 1
    c. pop() // return element at the top of the stack, remove top element, and reduce size of the stack by 1
    d. peek() //return element at the top of the stack, do not change stack or size
    e. isEmpthy() //returns true if size = 0, else return false
    f. size()//return the size of the stack
2. **Stack Implementation.** Implement your Stack by using a list:
    a. Decide what corresponds to top
    b. Decide which list methods map to the stack methods above
    c. Have methods in part 1 above call methods in list to get results
3. **User Interface.** Provide way to access and test all the methods above (such as scanner)

Be sure to:

1. Use proper and clear comments and variable names
    a. Include the following information at the top of your code:
    Name: *Your Name*
    Assignment: Program2
    Class: CSCE 146
    Semester: Spring 2014
    School: USC Sumter

Turn in: demonstrate your program to the instructor

Grading:

Function:	
Objectives met of part 1	30%
Objectives met of part 2	30%
Objectives met of part 3	15%
Organization: readable code and clear documentation	10%
Interface: user experience (clear direction) and handling of invalid input	15%