Homework 2, Question 4:

Part a wants us to create my own stack function to list all the elements in my stack. I created the function PrintStack which takes in an integer stack. We will first check and make sure the stack isn't empty. Once we do this we use a variable x to store the top value we print it out and the pop it and then use recursion to call the same function to make it repeat over and over until our stack is empty. Part b wants us to iterate through the function and change a value based on its position. So we create two stacks, myStack which will be our main and original stack, and tempStack which will be our temporary stack. After we fill myStack with random variables and print them out. We use a while loop to move all of the values that are in the positions before our wanted position from myStack to tempStack. We do this because there is no iterator operation that exists for stack. After we moved our unwanted position/valuesto tempStack we changed our desired value, and then use another while loop to move everything back to myStack and then print it out again showing our new stack with the changed value.