

Assignment22srcMyStackmain

Project

Assignment22 [ArithmeticExpressionEvaluator]

.idea

backup

out

src

ArithmeticExpressionEvaluator

MyStack

ArithmeticExpressionEvaluator.iml

External Libraries

Scratches and Consoles

ArithmeticExpressionEvaluator.java

HangmanGameRunner.java

IndexOutOfBoundsException.java

ArrayList.java

MyStack.java

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/**

* The MyStack class implements a stack using an arraylist, which has elements that are of a generic type, in order to help with converting infix notation

* to postfix notation and uses the stack in computing the result from a stack in postfix notation.

* @Author: Vishak Srikanth

* @Version: 9/13/2021

*/

import java.util.ArrayList;

import java.util.EmptyStackException;

public class MyStack<T> {

// initialize an arraylist with elements that are of a generic type

private ArrayList<T> stackElements;

/**

*use a variable of an integer type called top that represents the index of the element in the array list that is

*at the top of the stack

*/

private int top;

/**

* The constructor for class MyStack creates a arraylist of a generic type and sets the index of the top element to be

* -1.

*/

public MyStack() {

stackElements = new ArrayList<T>();

top = -1;

Run: MyStack

/Library/Java/JavaVirtualMachines/jdk1.8.0_271.jdk/Contents/Home/bin/java ...

Adding 1st element to stack: 2

Stack Contents:

2

top is: 0

Adding 2nd element to stack: 5

Stack Contents:

5

2

top is: 1

Popping the stack gives: 5

Stack Contents:

2

top is: 0

Peeking on stack now yields: 2

Stack Contents:

2

top is: 0

Popping the stack gives: 2

Stack Contents:

top is: -1

Is stack empty? YES

Process finished with exit code 0

Database

Structure

Favorites