United International University (UIU) Dept. of Computer Science and Engineering Data Structures Laboratory Course Code: CSI-218

Solve following Programming Problems:

- 1. Implement a *stack data structure* (*for integer numbers*) that consists of following operations:
 - a. Push // insert at top
 - b. Pop // delete from the top
 - c. Is_full // check whether the stack if full or not
 - d. Is_empty // check whether the stack is empty or not
 - e. Top_up // return the top element
- 2. WAP that will evaluate postfix notations using a *stack*.

Sample Inputs	Sample Outputs
56+82/*3+	Result: 47
23+6*	Result: 30

[Assignment - 03]

1. WAP that will check for brackets in a mathematical expression whether it is balanced or not.

Sample Inputs	Sample Outputs
{({})([])}}	Closing bracket overflow
[{{({})([])}}]	Balanced
[{{({})({})}}]	Unmatched
(()){{{[]}}{[][]}}	Opening bracket overflow