

Lebanese University
Faculty of Science
Section I

BS - Computer Science
2018-2019

I2206

Data Structures

LS 4 : Infix to Postfix Expression and Evaluation

Exercise 1 Write a function that evaluates a postfix expression.

The input expression is a string composed of digits ¹ and operators ². The output should be the value of the postfix expression.

Use `prog.c` provided with `LS4.zip` file to test your function.

Exercise 2 Write a function that converts an infix expression to its equivalent postfix one.

The input expression is a string composed of digits ¹ and operators ³. The output should be an expression in postfix notation.

Use `prog.c` provided with `LS4.zip` file to test your function.

Examples :

Infix Expression	Postfix Expression	Value
$((6 - (2 + 3)) * (3 + 8 / 2)) \$ 2 + 3$	6 2 3 + - 3 8 2 / + * 2 \$ 3 +	52
$7 - (\# (\# (2 + 3))) \$ 2$	7 2 3 + # # 2 \$ -	-18

1. 0 till 9

2. /, *, -, +, \$ (denotes exponentiation) and # (denotes unary minus)

3. /, *, -, +, \$ (denotes exponentiation), # (denotes unary minus), (and)