

Experiment 5

Aim

→ Write a program to evaluate postfix expression

Lab outcome

→ select appropriate data structure and apply it for solve a problem

Practice Problem

Q1. Evaluate.

→ 5 4 6 + * 4 9 3 / + *

Reading	stack	Evaluation
5	5	
4	5 4	
6	5 4 6	
+	5 10	$4+6=10$
*	50	$5*10=50$
4	50 4	
9	50 4 9	
3	50 4 9 3	
/	50 4 3	$9/3=3$
+	50 7	$4+3=7$
*	350	$50*7=350$

Q2. Evaluate.

→ 4 10 5 + * 15 3 / -

Reading	Stack	Evaluation
4	4	
10	4 10	
5	4 10 5	
+	4 15	$10 + 5 = 15$
*	60	$15 * 4 = 60$
15	60 15	
3	60 15 3	
/	60 5	$15 / 3 = 5$
-	55	$60 - 5 = 55$