

Challenging Exercises (03-10-2022)

1. Write a program to implement a 3-stacks of size 'm' in an array of size 'n' with all the basic operations such as IsEmpty(i), Push(i), Pop(i), IsFull(i) where 'i' denotes the stack number (1,2,3), $m \leq n/3$. Stacks are not overlapping each other. Leftmost stack facing the left direction and other two stacks are facing in the right direction.
2. Most of the bugs in scientific and engineering applications are due to improper usage of precedence order in arithmetic expressions. Thus it is necessary to use an appropriate notation that would evaluate the expression without taking into account the precedence order and parenthesis.

Write a program to convert the given arithmetic expression into

- i. Reverse Polish notational
- ii. Polish notation