

Lab 5 - Stack & its Application : Parentheses Matching

You are Designing a part of C compiler which requires you to check for balanced parentheses in an expression using a Stack data structure implemented using a singly linked list.

Given an expression string exp , write a program to examine whether the pairs and the orders of “{,}”, “(,)”, “[,]” are correct in expression. The program should print 1 for a balanced expression and 0 for an unbalanced expression.

Input Format:

First line contains N, the number of expressions to follow. Each expression is a string made up of parentheses.

Output Format:

For each expression, print the required answer in one line.