

**CS5103/MC5101: Assignment 8(Practice Assignment)****Date:****09/10/24****Question 1:**

Write a program to check whether the given string has a valid parenthesis or not.

**Constraints:**

String will have input in the form of a small bracket(), square bracket[], curly brackets{ }.

**Input Format:**

Input will be a string.

**Output:**

The given string is valid or invalid.

**Test Case 1:**

{{{}}}

**O/P:** Valid

**Test Case 2:**

{{[]}}

**O/P:** Invalid

**Question 2:**

Given an array, print the Next Greater Element for every element.

**Input Format:**

Input will be a number of elements n, and it is followed by n elements..

**Output:**

The Next greater Element for an element x is the first greater element on the right side of x in the array. Elements for which no greater element exists, consider the next greater element as -1.

**Test Case 1:**

arr[] = [ 4 , 5 , 2 , 25 ]

**O/P:**     4    -> 5  
             5    -> 25  
             2    -> 25  
             25   -> -1

**Question 3:**

Implement stack using two queues.