

1. Write a class MyStack to maintain stack of characters
add push, pop, isEmpty, isFull functions.
write default and parametrized constructor
2. use the MyStack created in Q1. to test all the functions
3. use MyStack class to check whether given string is balanced paranthesis or not
example
 {{{}}} ----- o/p balance string
 {{{}}{}} --- balance string
 {{{}} ----- not balanced string
 {{{}}} ----- not balanced

Calculate time complexity of the algorithm to check the string is balanced or not.

Using Linear Queue and circular Queue

1. Write a program to store strings in queue and display them in the same order in same sequence.
2. Write a program to maintain waiting list for of customers.
for each customer store customer id, customer name, mobile, email
(Hint: create customer class and create queue of customer objects)
display menu.
 1. add new customer (hint use enqueue operation to add a customer object in array)
 2. delete customer from queue (hint use dequeue operation to delete a customer object from array)
 3. display waiting list (hint :display queue)
 4. exit