- 1. Reverse a Stack with the help of another empty stack
- Given an expression check if brackets are balanced e.g. { a + [b+ (c + d)] + (e + f) }
- 3. Reverse a Queue
- 4. Implement a Stack using Two Queues
- 5. Implement Stack using Arrays as well as Linked List
- 6. Implement Queue using Arrays as well as Linked List
- 7. Check for duplicate parenthesis in an expression e.g. ((a + b) + ((c+d))) has duplicate parenthesis.
- 8. The span si of a stock's price on a certain day i is the maximum number of consecutive days (up to the current day) the price of the stock has been less than or equal to its price on day i. Given input array with all stock prices return the spans. We can do this using an array in O(n^2) time but stack can help us do it in O(n) time. Implement the array approach if you can't find a solution using stack
- 9. A deque is a data structure consisting of a list of items, on which the following operations are possible:
 - 1. push(x,d): Insert item x on the front end of deque d.
 - 2. pop(d): Remove the front item from deque d and return it.
 - 3. inject(x,d): Insert item x on the rear end of deque d.
 - 4. eject(d): Remove the rear item from deque d and return it.

Write routines to support the deque that take constant time per operation 10. For sure, the love mobiles will roll again on this summer's street parade. Each year, the organisers decide on a fixed order for the decorated trucks. Experience taught them to keep free a side street to be able to bring the trucks into order. The side street is so narrow that no two cars can pass each other. Thus, the love mobile that enters the side street last must necessarily leave the side street first. Because the trucks and the ravers move up closely, a truck cannot drive back and re-enter the side street or the approach street. You are given the order in which the love mobiles arrive. Write a program that decides if the love mobiles can be brought into the order that the organisers want them to be.

Input:There are several test cases. The first line of each test case contains a single number n, the number of love mobiles. The second line contains the numbers 1 to n in an arbitrary order. All the numbers are separated by



single spaces. These numbers indicate the order in which the trucks arrive in the approach street. No more than 1000 love mobiles participate in the street parade. Input ends with number 0.

Output: For each test case your program has to output a line containing a single word yes if the love mobiles can be re-ordered with the help of the side street, and a single word no in the opposite case.

Example

Sample input:

5

51243

0

Sample output:

yes

