Stack and Queue

1. At first, implement the stack using an array. Assume, at any time, a character can be inserted/deleted from the stack. Also, implement a function that uses the stack to reverse the given string and return the reversed string.

2. At first, implement the circular queue using an array. Assume, at any time, a character can be inserted/deleted from the queue. Also, implement a function that uses the circular queue to reverse the given string and return the reversed string.

3. You are given three kinds of parenthesis expressions. Write a function that checks whether the given expression is right or not.

4. You are given three kinds of parenthesis expressions. Write a function that returns the longest balanced expression.

5. Decode a given sequence to construct a minimum number without repeated digits.[help]

6. Implement priority queue.

7. Assume, you maintain a list where any time an element can be inserted. Write a function that takes k as input and returns the kth largest element from the list.