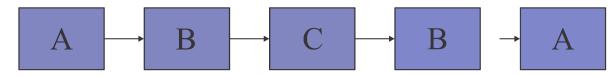# Stack Questions

Question 1 :

Palindrome Linked List

We have a singly linked list of characters, write a function that returns true if the given list is a palindrome, else false.

Input : A->B->C->B->A
Output : Yes It is Palindrome

Question 2 :

Simplify Path

We hava an absolute path for a file (Unix-style), simplify it. Note that absolute path always begin with '/' (root directory), a dot in path represent current directory and double dot represents parent directory.

Sample Input 1 : /apnacollege/
Sample Output 1 : /apnacollege

Sample Input 1 : /a/..
Sample Output 1 : /

Question 3 :

Decode a string

We have an encoded string s and the task is to decode it. The pattern in which the strings are encoded is as follows.

Sample Input 1 : 2[cv]
Sample Output 1 : cvcv

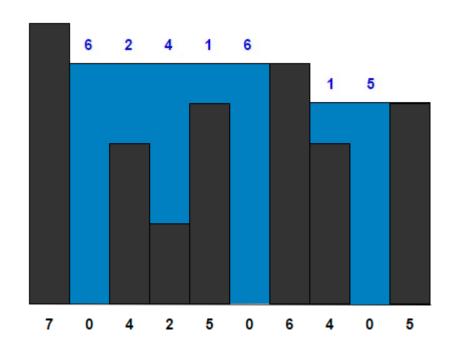**Sample Input 2** : 3[b2[v]]L
Sample Output 2 : bvvbvvbvv

Question 4 :

Trapping Rain Water

We have an array of N non-negative integers arr[] representing an elevation map where the width of each bar is 1, compute how much water it is able to trap after raining.

Note: We have already solved this Question using Arrays but you have to now solve this using a Stack.

Sample Input 1 : [7 0 4 2 5 0 6 4 0 6]
Sample Output 1 : 25