Level 1: Basic

VECTOR

01.Write a C++ program that returns the elements in a vector that are strictly smaller than their adjacent left and right neighbours. First it take input of number of element then a vector.

Sample Input	Sample Output
7 1 2 5 0 3 1 7	0 1

02.Write a C++ program that returns the sum of that elements right side values.First it take input of number of element then a vector.

Sample Input	Sample Output
6 1 2 5 1 3 1	12 10 5 4 1 0

03.Write a c++ program where it takes q query and is query have some input x

- For input x==1 it take another value val1 as input, you need to push a value at 2nd index of vector. If vector is empty push it at first index.
- For input x==2 it take another value val2 as input, you need to push a value at 2nd index from last of vector. If vector is empty push it at first index from last.

Sample Input	Sample Output
5 1 3 1 4 1 5 2 1 2 8	3 5 1 8 4

04.Write a program to implement a stack and accept some numeric values. Find k^{th} element of the stack.

Sample Input	Sample Output
5 20 10 50 40 70 2	10

Note: Here k = 2, 2nd Value is 10

05. Write a c++ program to find every values Right side max value. Return a vector.First, it take input of number of element then a vector.

Sample Input	Sample Output
6 1 2 5 1 2 1	5 5 2 2 1 0

06.Write a program that accepts a string and reverse it using a stack.

Sample Input	Sample Output
phitron	nortihp

07. Write a program to delete the n^{th} element of a queue.

Sample Input	Sample Output
5 10 20 30 40 50 2	10 30 40 50

Level 2: Practice Problem on Linked list

-(All problems are a little bit harder than the module's problems. Don't try to solve all the problems. Try to solve as much as you can.)

1. Merge-two-sorted-lists [Easy]
2. Remove-duplicates-from-sorted-list-ii [Medium]
3. Odd-even-linked-list [Medium]
4. Design-linked-list [Medium]
5. Delete-the-middle-node-of-a-linked-list [Medium]
6. Write a function named `move_tail()` which will move the tail of a singly linked list to the first position of the list.
   For example: If the list looks like this,
   ```
   List: 2 -> 4 -> 1 -> 10 -> 5
   ```
   After the operation, the list will look like this,
   ```
   List: 5 -> 2 -> 4 -> 1 -> 10
   ```
7. Circularly-linked [Medium]
8. Insertion-in-a-singly-linked-list [Easy]

Level 3-Contest(Advance Problem):

https://vjudge.net/contest/640490

Password: mypractice

How to use vjudge?
Instruction video:
https://drive.google.com/file/d/1uJpFUKhFufJYw4DPzcn_nKr8S_o3Z3Pk/view?usp=sharing

Instructions for Participating in the Contest on Vjudge

1. **Register on Vjudge:**
    - Go to the Vjudge website.
    - Click on the "Register" button.
    - Fill in the required details and complete the registration process.
2. **Login to Vjudge:**
    - After registering, log in to your Vjudge account using your credentials.
3. **Access the Contest:**
    - Click on the contest link provided to you (ensure you are logged in).
4. **Login to the Contest:**
    - When prompted, enter the contest password provided to you.
5. **Start Solving Problems:**
    - Once logged in, you will see the list of problems in the contest.
    - Start solving the problems by clicking on each problem and submitting your solutions.