Nearest greater to Left. (NGL)

Problem Statement :-

Given an array of integers, find the closest (not considering distace but value) greater on Left of every element. If an element has no greater on the Left side print -1:

- In this we will check on Left side

Example:-

arr[]:

1	3	2	4

i   i   i   i

-1 -1 3 -1.

- This time check on left hand side

← ← ← ←

1 3 2 4

-1 -1 3 -1

Brute force

```
for(int i=0; i<n; i++)
    for(int j=i-1; j>=0; j--
```

j depends i
⇓
Stack will be used here

arr[]:

1	3	2	4

Stack

2
3
4

-1	-1	3	-1

vector (v)

changes:- 1) traverse from left to right

2) No reverse required

- change in for loop

- No need to reverse vector.

Code-

```
Vector <int> v);
Stack <int> s;

for (int i=0; i< size; i++)
{
    if ( s.size() == 0 )
    {
        v.push-back(-1);
    }
    else if (s.size() > 0  &&  s.top() > arr[i])
    {
        v.pushback (s.top() )
    }
    else if (s.size() > 0  &&  s.top() <= arr[i])

    while ( s.size() > 0 &&  s.top() <= arr[i])
    {
        s.pop();
    }
    if ( s.size() == 0 )
        v.push-back(-1)
    else
        v.push-back(s.top())

    s.push (arr[i]);
}
```