

Stack:-

Greatest Element on Right Side:-

6	8	0	1	3
8	-1	1	3	-1

4	3
3	1
2	0
1	8
0	6

arr [6, 8, 0, 1, 3]
res [8, -1, 1, 3, -1]
i = 0, 1, 2, 3, 4, 5

[20, 30, 40, 50, 70, 70, 20, 70, -1]

0 1 2 3 4 5 6 7 8
10, 20, 30, 40, 50, 20, 10, 20, 70

i = 9

c = 70

8
7
6
5
4
3
2
1
0

if (st.isEmpty() || arr[st.peek()] > arr[i])
st.push(i);

else {

while (st.isEmpty() == false && arr[st.peek()] < arr[i]) {

res[st.pop()] = arr[i];

}

st.push(i)

}

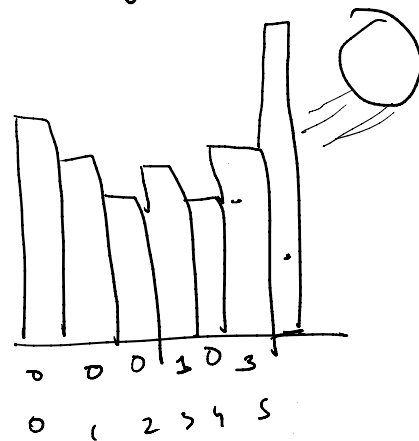
Stack Span:- greater element on the left side

0 1 2 3 4 5 6 i = days
[100 80 60 70 60 75 85]

[1, 1, 1, 2, 1, 4, 6]

i = 1

5
4
3
2
1
0

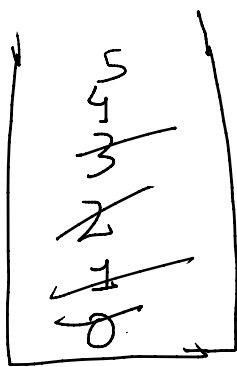


0 1 2 3 4 5
[1, 1, 1, 2, 1, 4, 6]

1

1

0 1 2 3 4 5
 [10, 4, 5, 90, 120, 80]
 [1, 1, 2, 4, 5, 1]



$i = 6$
 $u = 80$

```

for (i = 0 to arr.length - 2)
  while (1 < st.empty() && arr[st.peek()] <= arr[i]) {
    st.pop();
  }
  res[i] = i - st.empty() - 1;
  st.push(i);
  }
  
```

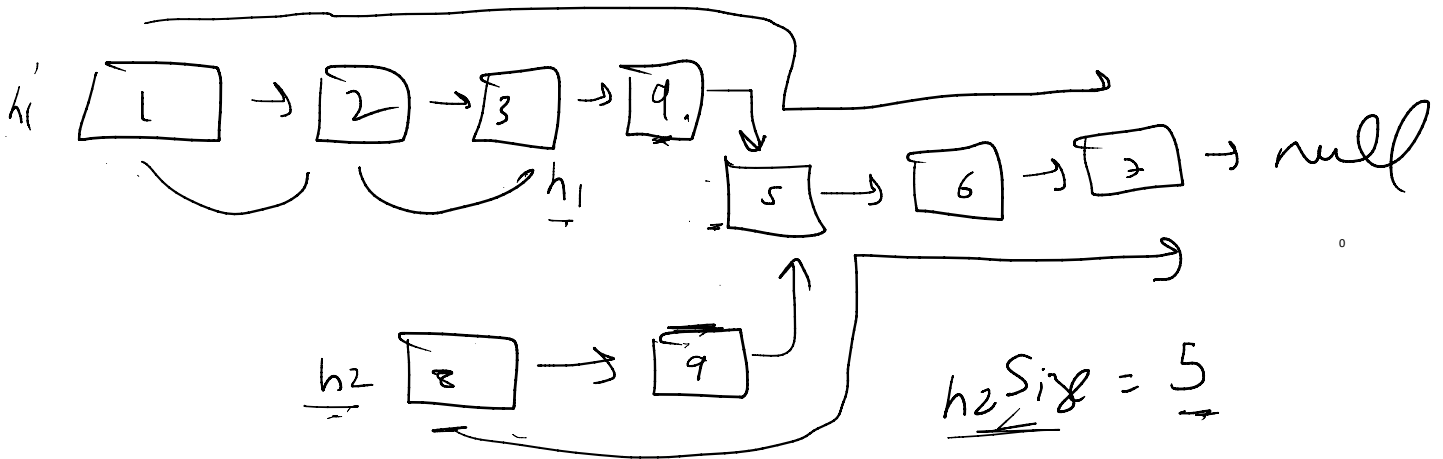
4 Ws -

<https://practice.geeksforgeeks.org/problems/immediate-smaller-element1142/1>

Smaller element on left / right side.

Intersection of LLs -

$h1Size = 7$



$h2Size = 5$

$$7 - 5 = 2$$