https://course.acciojob.com/idle?question=93a43cbf-871f-41bf-9af6-b67346113351

- HARD
- Max Score: 50 Points

Maximum of all subarrays of size K

Given an array A and an integer, K. Find the maximum for each and every contiguous subarray of size K.

Input Format

The first line contains two integers `N` and `K`.

The second line contains `N` space-seperated integers.

Output Format

Return the maximum for every subarray of size K.

Example 1

Input

```
9 3
1 2 3 1 4 5 2 3 6
```

Output

```
3 3 4 5 5 5 6
```

Explanation

1st contiguous subarray = {1 2 3} Max = 3 2nd contiguous subarray = {2 3 1} Max = 3 3rd contiguous subarray = {3 1 4} Max = 4 4th contiguous subarray = {1 4 5} Max = 5 5th contiguous subarray = {4 5 2} Max = 5 6th contiguous subarray = {5 2 3} Max = 5 7th contiguous subarray = {2 3 6} Max = 6

Example 2

Input

```
6 2
4 1 3 1 1 2
```

Output

```
4 3 3 1 2
```

Explanation

1st contiguous subarray = {4 1} Max = 4 2nd contiguous subarray = {1 3} Max = 3 3rd contiguous subarray = {3 1} Max = 3 4th contiguous subarray = {1 1} Max = 1 5th contiguous subarray = {1 2} Max = 2

Constraints

- **1 ≤ N ≤ 10^5**
- **1 ≤ K ≤ N**
- **0 ≤ A[i] <= 10^5**

Topic Tags

- **Deques**

My code

```
import java.util.*;
import java.lang.*;
import java.io.*;

public class Main
{
	public static void main (String[] args) throws java.lang.Exception
	{
		//your code here
```

```
Scanner s=new Scanner(System.in);
int n=s.nextInt();
int k=s.nextInt();
int arr[]=new int[n];
for(int i=0;i<n;i++)
	arr[i]=s.nextInt();
for(int i=0;i<=n-k;i++)
	{
		int max=arr[i];
		for(int j=i;j<i+k;j++)
			{
			  if(max<arr[j])     max=arr[j];
			}
		System.out.print(max+" ");
	}
```