

```

1 // Q110: Write a program to take an integer array arr and an integer k as inputs. The task is to find the maximum element in each subarray of size k moving from left to right.
2
3 /*
4 Sample Test Cases:
5 Input 1:
6 arr[1, 2, 3, 1, 4, 5, 2, 3, 6] n = , k = 3
7 Output 1:
8 3 3 4 5 5 6
9
10 Input 2:
11 arr[5, 1, 3, 4, 2] n = , k = 1
12 Output 2:
13 5 1 3 4 2
14
15 */
16
17 #include <stdio.h>
18
19 int main() {
20     int n, k, i, j, max;
21     printf("Enter number of elements: ");
22     scanf("%d", &n);
23
24     int arr[n];
25     printf("Enter %d elements: ", n);
26     for (i = 0; i < n; i++) {
27         scanf("%d", &arr[i]);
28
29     printf("Enter k: ");
30     scanf("%d", &k);
31
32     for (i = 0; i <= n - k; i++) {
33         max = arr[i];
34         for (j = i + 1; j < i + k; j++) {
35             if (arr[j] > max)
36                 max = arr[j];
37         }
38         printf("%d", max);
39         if (i != n - k)
40             printf(" ");
41     }
42     printf("\n");
43
44     return 0;
45 }

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```

PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc ./abc.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
Enter number of elements: 9
Enter 9 elements: 1 2 3 1 4 5 2 3 6
Enter k: 3
3 3 4 5 5 5 6
PS C:\Users\drago\OneDrive\Desktop\C H.W> gcc ./abc.c
PS C:\Users\drago\OneDrive\Desktop\C H.W> ./a.exe
Enter number of elements: 5
Enter 5 elements: 5 1 3 4 2
Enter k: 1
5 1 3 4 2
PS C:\Users\drago\OneDrive\Desktop\C H.W> █

```