

CSE291 Data Structures Lab

Lab Sheet 5

Double Ended Queue

1. Implement a double ended queue using circular array.
2. Implement an algorithm to find the maximum of all sub arrays of size k using double ended queue.

For example:

Input:

`arr[] = {1, 2, 3, 1, 4, 5, 2, 3, 6}`

`k = 3`

Output:

3 3 4 5 5 5 6

Input:

`arr[] = {8, 5, 10, 7, 9, 4, 15, 12, 90, 13}`

`k = 4`

Output:

10 10 10 15 15 90 90

(Hint to this question is uploaded in Resources)