

United International University
DSA-1 Lab Midterm
Section A - Total marks: 20

1. Add the following function in your doubly linked list.

DeleteBefore(int element, int k)

Delete the k-th node before the **element**. [10]

Sample Input:

Doubly linked List: 12 <-> 32 <-> 0 <-> 55 <-> 101 <-> 8

DeleteBefore(55, 2) will delete the node 32

Output: 12 <-> 0 <-> 55 <-> 101 <-> 8

2. Given an array of integers, find the median using selection sort. The first line of the input will contain the number of elements in the array and the second line of the input will contain the elements in the array. [5]

Sample Input:

11

1, 3, 2, 0, 10, 7, 4, 8, 9, 6, 5

Output: 5

3. You have been given a sorted array of integers, write a program to find the indices of the two integers that multiply up to a given target. [5]

Sample Input:

nums[] = {2, 5, 7, 10, 12}

target = 14

Output: 0, 2