# United International University
# DSA-1 Lab Midterm
# Section C

1. Add the following function in your doubly linked list.
   **InsertAfter(int element, int newVal, int k)**
   Insert newVal after k nodes of the **element**. [10]
   **Sample Input:**
   Doubly linked List: 12 <-> 32 <-> 0 <-> 55 <-> 101 <-> 8
   DeleteBefore(0, 3, 2) will insert 3 after 2 nodes of 0
   **Output:** 12 <-> 32 <-> 0 <-> 55 <-> 101 <-> 3 <-> 8

2. Given an array of integers, find the k-th largest element of the array using insertion sort. The first line of the input will contain the number of elements in the array, the second line will contain the value of k and the third line of the input will contain the elements in the array. [5]
   **Sample Input:**
   11
   3
   1, 3, 2, 0, 10, 7, 4, 8, 9, 6, 5
   **Output:** 8

3. You have been given a sorted array of integers, write a program to find the indices of the two integers so that the latter one is the square of the former one. [5]
   **Sample Input:**
   nums[] = {2, 5, 7, 10, 12, 25}
   **Output:** 1, 5