CSE2216: Data Structure and Algorithms-1 Lab

Assignment-1 Total: 20 marks

* **Implement Doubly Linked List:**

Your task is to implement functions for the following tasks in a doubly linked list. Use the template provided.

1. **InsertFirst(int key):** Insert the key into the head of the doubly linked list.
2. **InsertLast(int key):** Insert the key into the head of the doubly linked list.
3. **InsertAt(int pos,int key):** Insert the key in the defined position in the linked list.
4. **DeleteFirst():** Delete the first element of the list
5. **DeleteLast():** Delete the last element of the list
6. **DeleteAt(int k):** Delete the element at position k
7. **Search(int key):** return the position of the key into the list, if not in the list return -1.
8. **findMax():** return the max element of the list
9. **findMin():** return the min element of the list

**10.displayList():** This will print the elements in the linked list

**Submission guideline:**

1. Rename the c file with your student id.

2. Submit the c file only.

Submission deadline: 11 PM, 5 July.