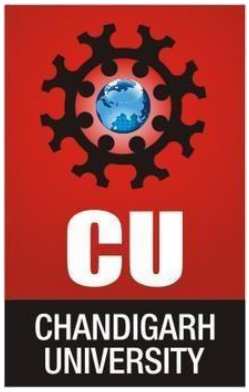
CHANDIGARH UNIVERSITY
UNIVERSITY INSTITUTE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



Submitted By: Satyam **Submitted To: Navneet Chaudhry**	
Subject Name	Competitive Coding
Subject Code	21 CSP-314
Branch	BE-CSE
Semester	5th

LAB INDEX

NAME: Satyam
SUBJECT NAME: Competitive Coding Lab
UID: 20BCS9393
SUBJECT CODE: 21CSP-314
SECTION: 607-A

Sr. No	Program	Date	Evaluation				Sign
			LW (12)	VV (8)	FW (10)	Total (30)	
1.	**ARRAYS:** https://www.hackerrank.com/challenges/30-arrays/problem https://www.hackerrank.com/challenges/simple-arraysum/problem?isFullScreen=true https://www.hackerrank.com/challenges/compare-thetriplets/problem?isFullScreen=true https://www.hackerrank.com/challenges/diagonaldifference/problem?isFullScreen=true	04-Aug-2022					
2.	**STACK & QUEUES:** https://www.hackerrank.com/challenges/equalstacks/problem?isFullScreen=true https://www.hackerrank.com/challenges/game-of-twostacks/problem?isFullScreen=true https://www.hackerrank.com/challenges/balancedbrackets/problem?isFullScreen=true https://www.hackerrank.com/challenges/down-to-zeroii/problem?isFullScreen=true https://www.hackerrank.com/challenges/trucktour/problem?isFullScreen=true	18-Aug-2022					

3.	**Linked List:** https://www.hackerrank.com/challenges/compare-two-linkedlists/problem?isFullScreen=true https://www.hackerrank.com/challenges/insert-a-node-into-asorted-doubly-linked-list/problem?isFullScreen=true	25-Aug-2022					

EXPERIMENT-1.3(a)

1. Aim/Overview of the practical:

To demonstrate the concept of Linked List.

2. Task to be done/ Which logistics used:

https://www.hackerrank.com/challenges/compare-two-linked-lists/problem?isFullScreen=true

You're given the pointer to the head nodes of two linked lists. Compare the data in the nodes of the linked lists to check if they are equal. If all data attributes are equal and the lists are the same length, return . Otherwise, return .

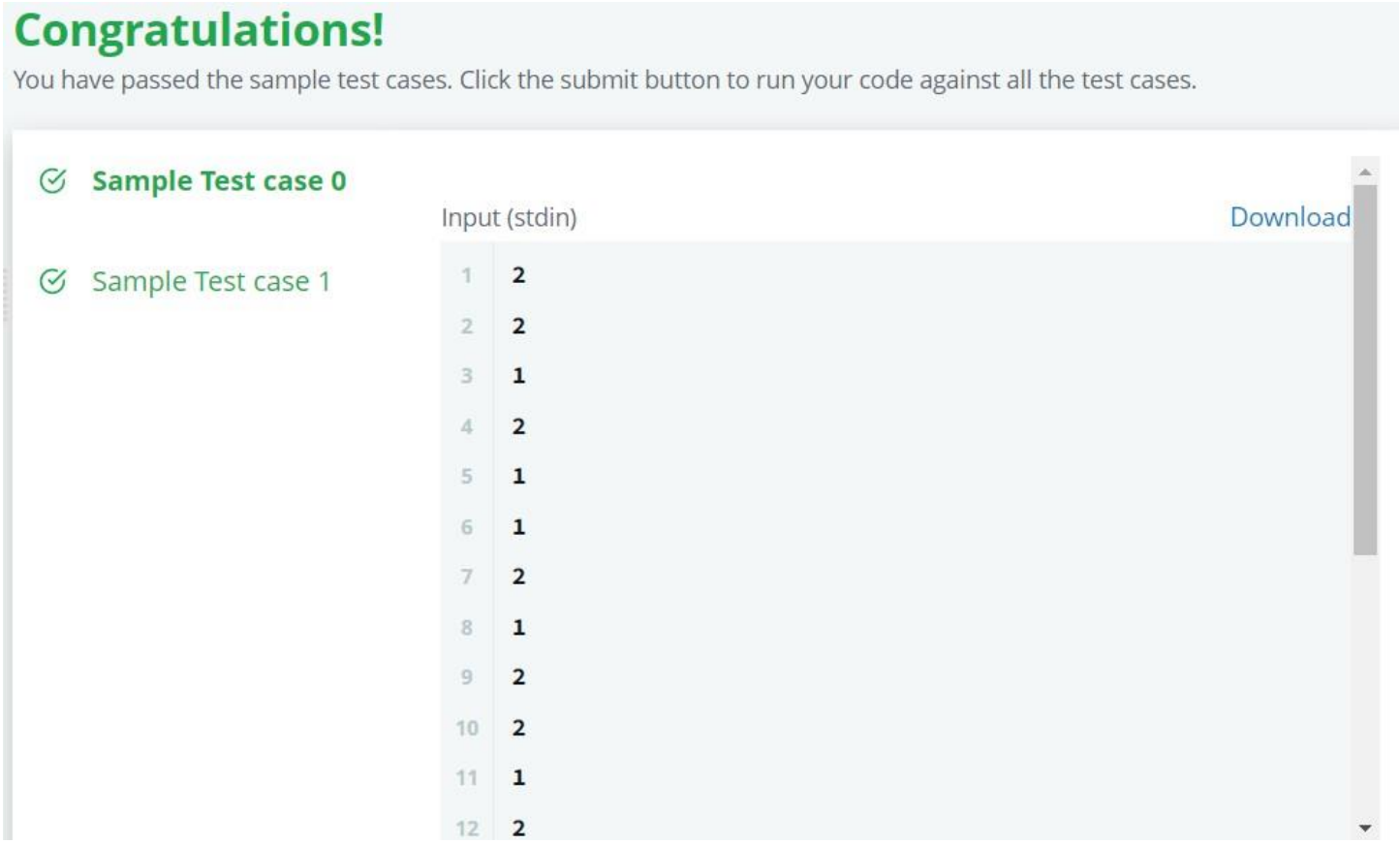
3. Steps for experiment/practical/Code:

```
bool compare_lists(SinglyLinkedListNode* head1, SinglyLinkedListNode* head2) {
while(head1!=nullptr && head2!=nullptr && head1->data==head2->data )
    {
        head1=head1->next;
head2=head2->next;

}
    if(head1==head2)
    {
        return 1;
```

```
    }
else     {
        return 0;
    }  }
```

4. Result/Output/Writing Summary:



EXPERIMENT-1.3(b)

1.Aim/Overview of the practical:

To demonstrate the concept of Linked List.

2. Task to be done/ Which logistics used:

https://www.hackerrank.com/challenges/insert-a-node-into-a-sorted-doubly-linked-list/problem?isFullScreen=true

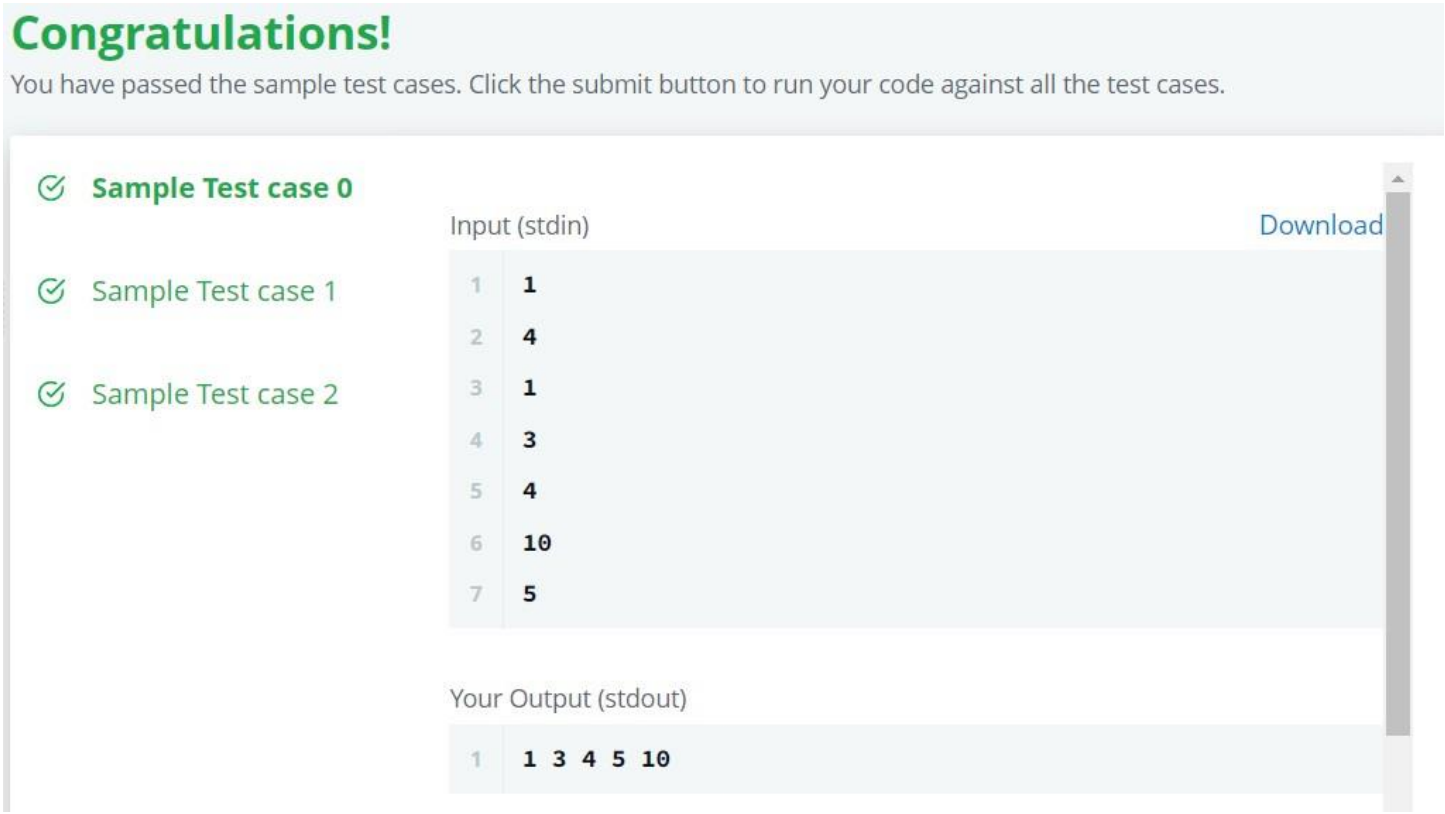
Given a reference to the head of a doubly-linked list and an integer, , create a new *DoublyLinkedListNode* object having data value and insert it at the proper location to maintain the sort.

3. Steps for experiment/practical/Code:

```
DoublyLinkedListNode* sortedInsert(DoublyLinkedListNode* llist, int data) {
DoublyLinkedListNode *temp=llist;     if(llist->data>data){         llist-
>prev=new DoublyLinkedListNode(data);         llist->prev->next=llist;
llist->prev->prev=NULL;         llist=llist->prev;         return llist;
    }
    while(temp->next!=NULL){         if(temp->next-
>data>=data){
            DoublyLinkedListNode *temp1=temp->next;
temp->next=new DoublyLinkedListNode(data);
temp->next->next=temp1;             temp->next-
>prev=temp;             temp->next->next->prev=temp-
>next;             return llist;
        }
        temp=temp->next;
    }
    temp->next=new DoublyLinkedListNode(data);
temp->next->prev=temp;     return llist;

}
```

4. Result/Output/Writing Summary:



Learning outcomes (What I have learnt):

1. Through this experiment I learn concepts of linked list.

2. different operations on doubly linked list.

3.Learned about insertion in linked list.

Evaluation Grid (To be created as per the SOP and Assessment guidelines by the faculty):

Sr. No.	Parameters	Marks Obtained	Maximum Marks
1.			
2.			
3.			