DAILY ONLINE ACTIVITIES SUMMARY

Date:	**19-06-2020**	**Name:**	**Anvitha Poojary**
Sem & Sec	**6A**	**USN:**	**4AL17CS008**

Online Test Summary

Subject	**C programming Quiz**		
Max. Marks		**Score**	

Certification Course Summary

Course	**Workshop exercise solving**		
Certificate Provider		**Duration**	

Coding Challenges

Problem Statement:

1 **.** To swap 2 numbers using pointer and function concept, return value from user defined function and print the swapped values in main() function.

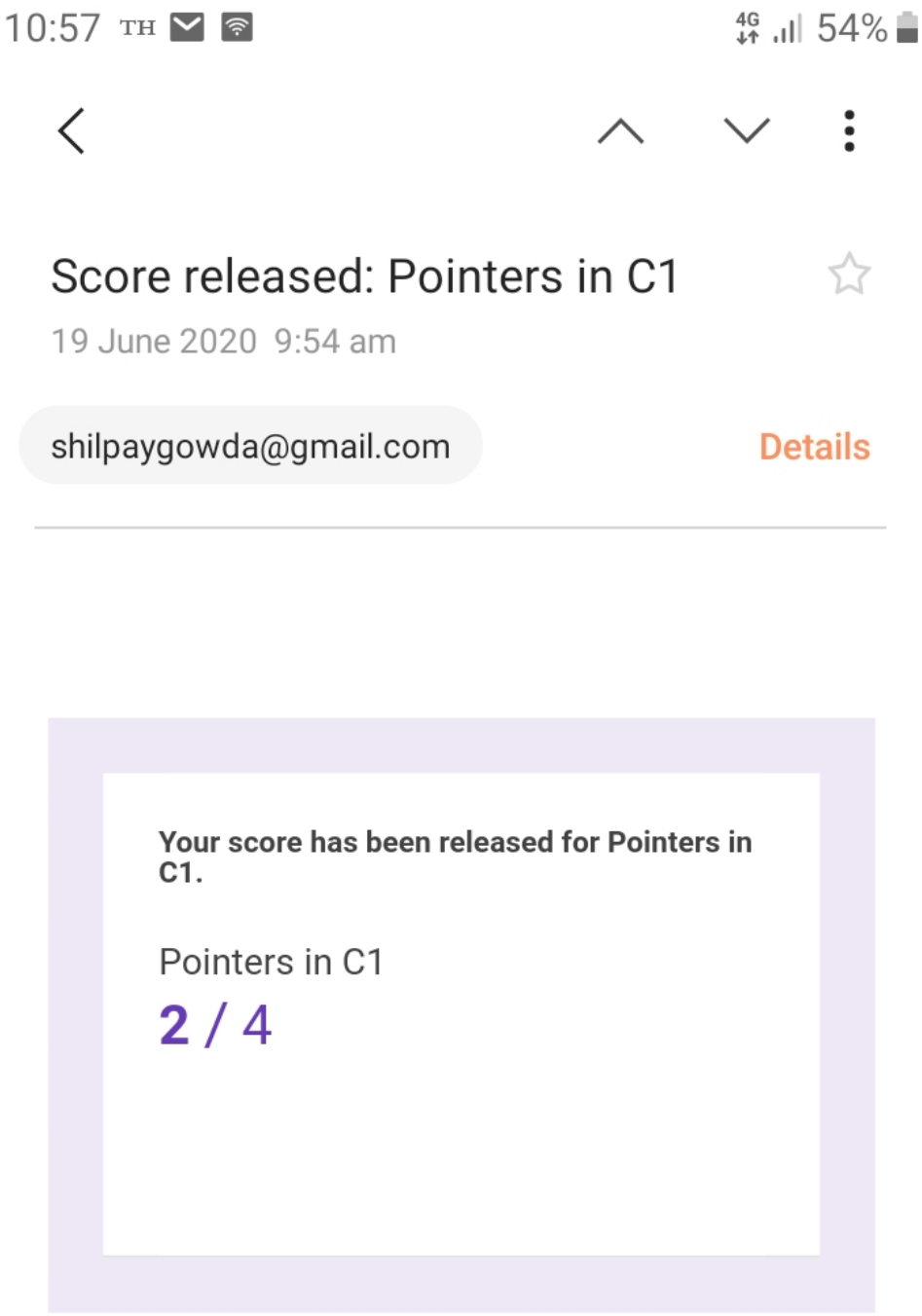
2. Given a positive integer n, count the total number of set bits in binary representation of all numbers from 1 to n.

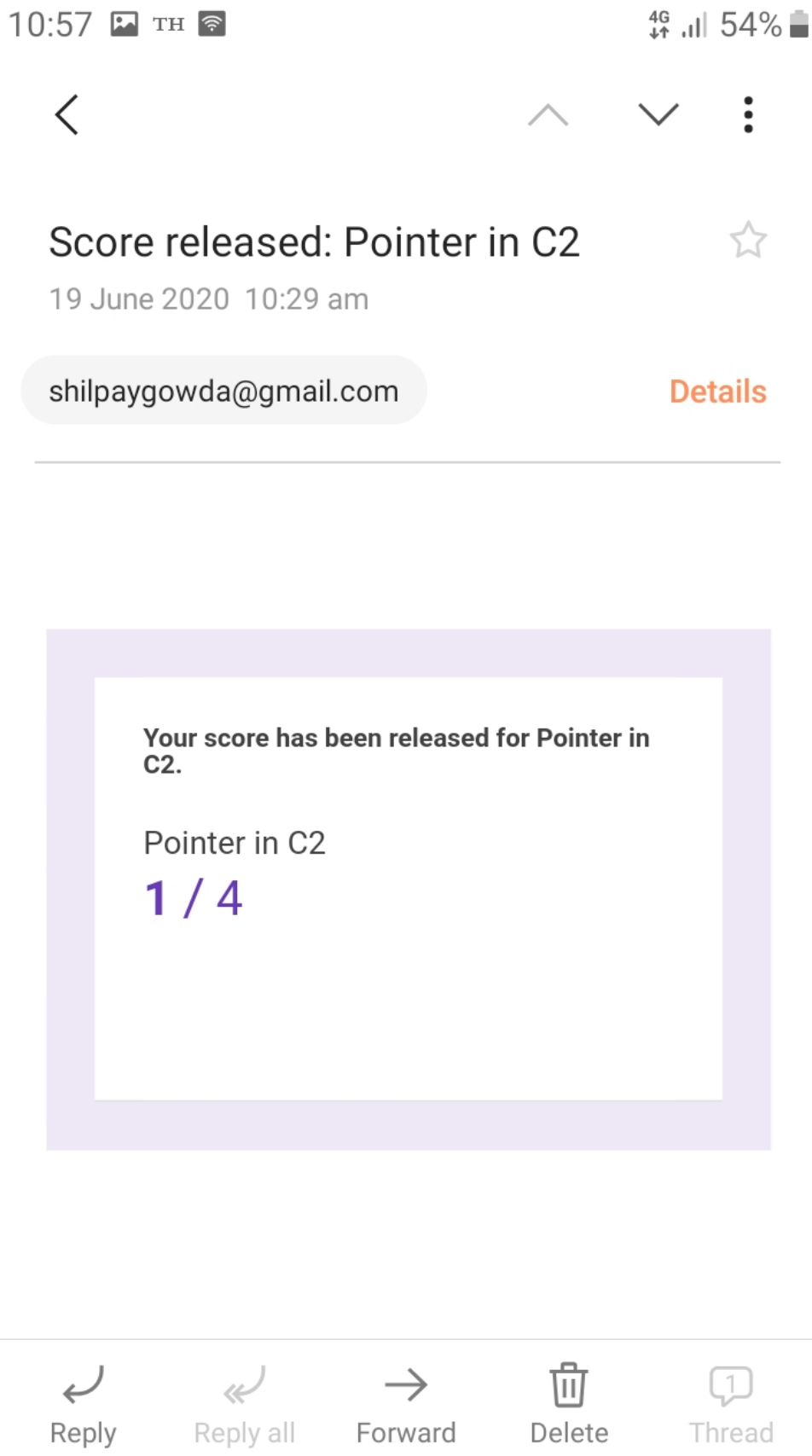
3. Write a Java program to create a doubly linked list of n nodes and display it in reverse order

Status:

Uploaded the report in Github	**yes**
If yes Repository name	https://github.com/anvithapo99/Daily-Report
Uploaded the report in slack	**yes**

C programming Quiz:


10:57 TH
4G 54%
Score released: Pointers in C1
19 June 2020 9:54 am
shilpaygowda@gmail.com
Details
Your score has been released for Pointers in C1.
Pointers in C1
2 / 4


10:57
TH
4G
54%
Score released: Pointer in C2
19 June 2020 10:29 am
shilpaygowda@gmail.com
Details
Your score has been released for Pointer in C2.
Pointer in C2
1 / 4
Reply
Reply all
Forward
Delete
Thread

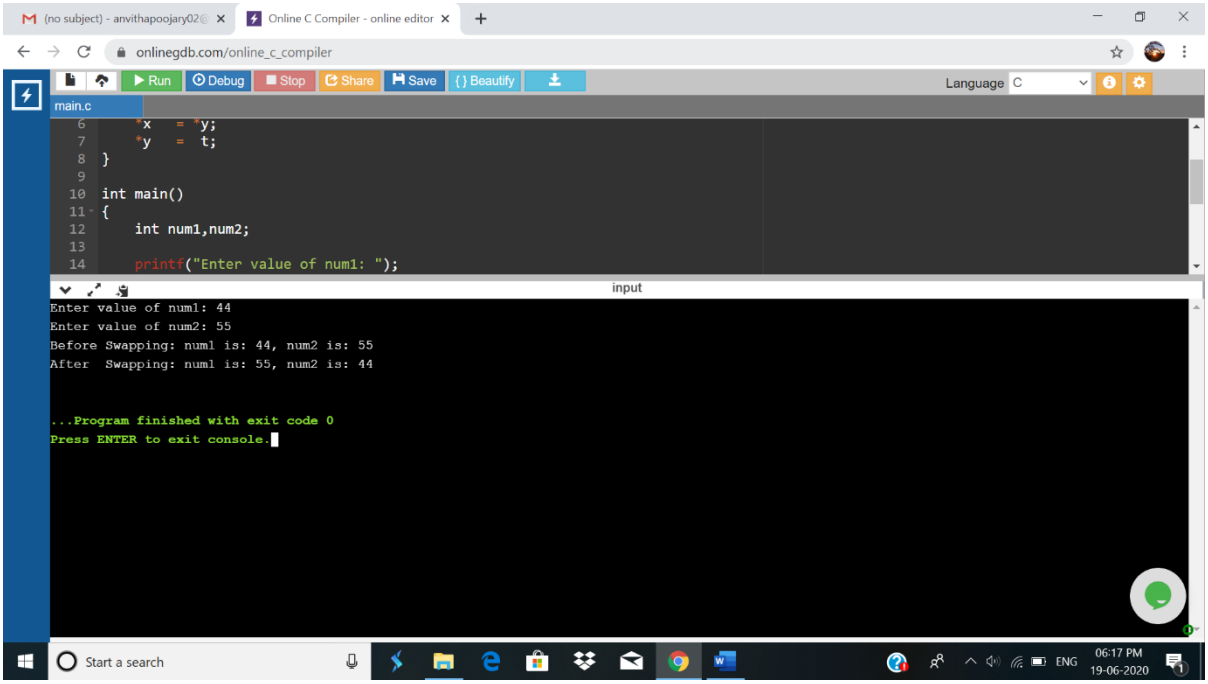
Coding Challenges Details:

1 . To swap 2 numbers using pointer and function concept, return value from user defined function and print the swapped values in main() function.

```
#include <stdio.h>

void swap(int *x,int *y)

{

   int t;

    t   = *x;

   *x   = *y;

   *y   =  t;

}


int main()

{

   int num1,num2;


   printf("Enter value of num1: ");

   scanf("%d",&num1);

   printf("Enter value of num2: ");

   scanf("%d",&num2);

   printf("Before Swapping: num1 is: %d, num2 is: %d\n",num1,num2);


   swap(&num1,&num2);

   printf("After  Swapping: num1 is: %d, num2 is: %d\n",num1,num2);
```

```
    return 0;
}
```

Output:



2. Given a positive integer n, count the total number of set bits in binary representation of all numbers from 1 to n.

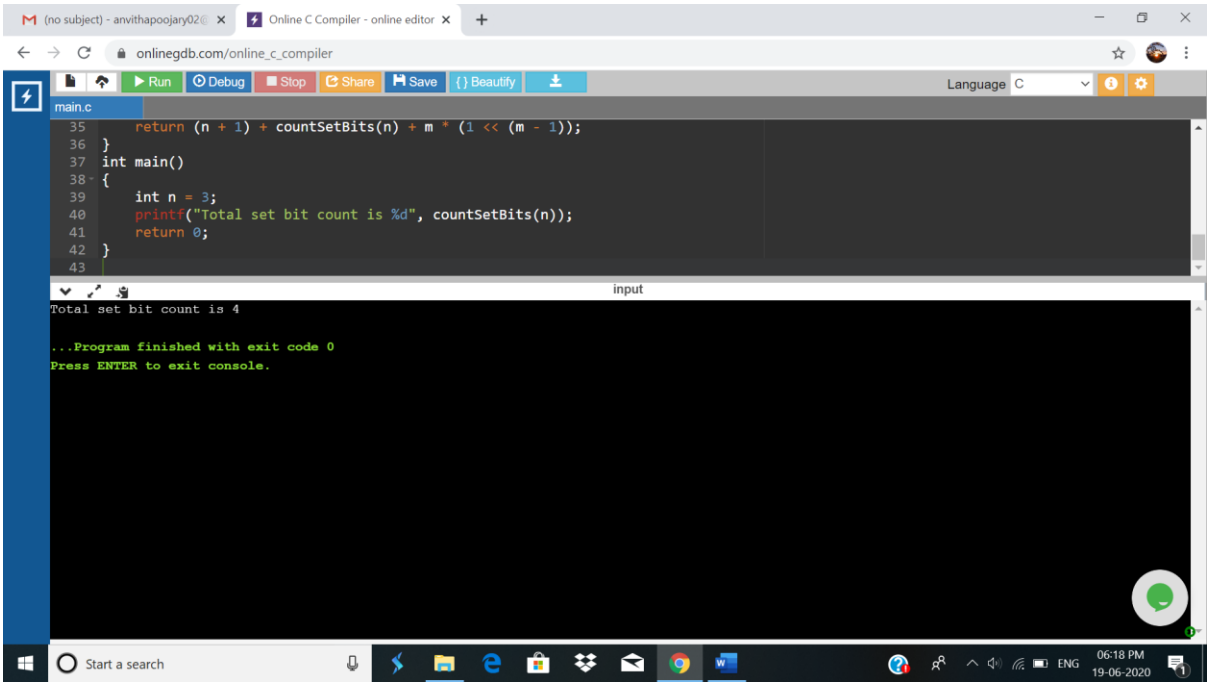
```
#include <stdio.h>

unsigned int getLeftmostBit(int n)

{

        int m = 0;

        while (n > 1) {

                n = n >> 1;

                m++;

        }

        return m;

}
```

```
unsigned int getNextLeftmostBit(int n, int m)
{
	unsigned int temp = 1 << m;
	while (n < temp) {
		temp = temp >> 1;
		m--;
	}
	return m;
} unsigned int _countSetBits(unsigned int n, int m);
unsigned int countSetBits(unsigned int n)
{
	int m = getLeftmostBit(n);
	return _countSetBits(n, m);
}

unsigned int _countSetBits(unsigned int n, int m)
{

	if (n == 0)
		return 0;	m = getNextLeftmostBit(n, m);
	if (n == ((unsigned int)1 << (m + 1)) - 1)
		return (unsigned int)(m + 1) * (1 << m);
	n = n - (1 << m);
	return (n + 1) + countSetBits(n) + m * (1 << (m - 1));
}
```

```
int main()

{

        int n = 3;

        printf("Total set bit count is %d", countSetBits(n));

        return 0;

}
```

Examples:
Input: n = 3
Output: 4
Input: n = 6
Output: 9

Hint: Read a positive integer (example: 3 indicates range), so u have to consider 1, 2, 3 as the input convert these numbers into binary and count the number of 1 in that (1- 0001, 2- 0010, 3- 0011) number of 1s from all 3 digit is 4 so the answer is 4



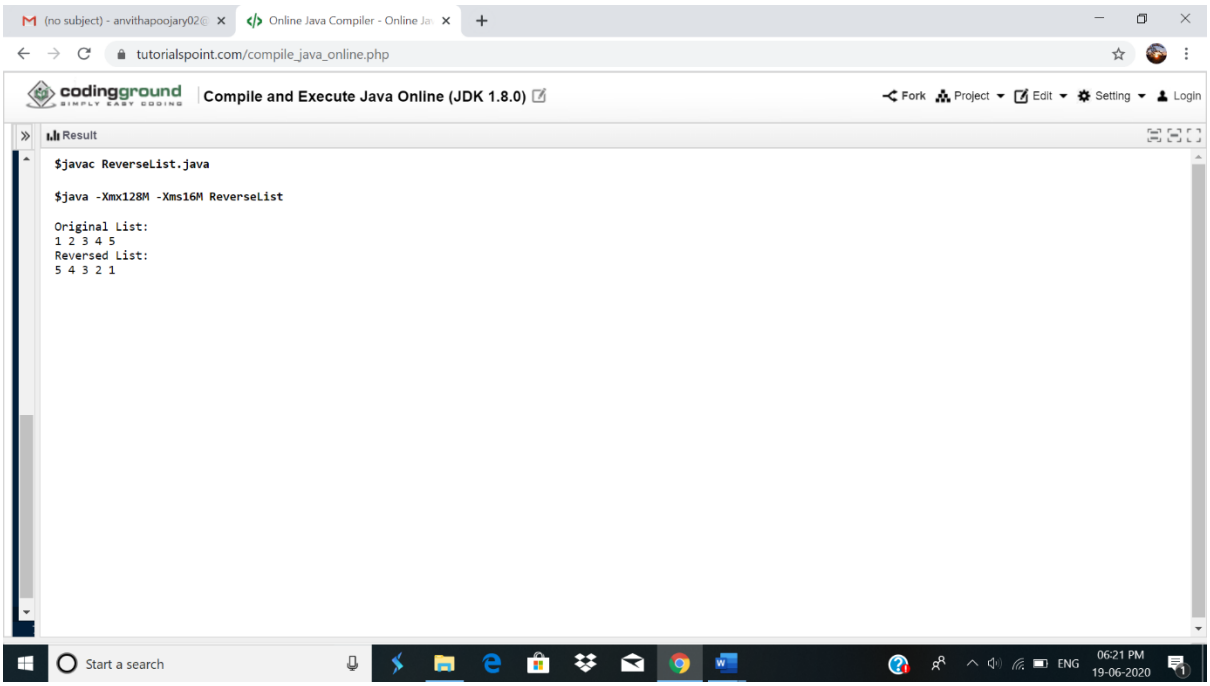
3. Write a Java program to create a doubly linked list of n nodes and display it in reverse order

```
public class ReverseList {


    class Node{
        int data;
        Node previous;
        Node next;


        public Node(int data) {
            this.data = data;
        }
    }


    Node head, tail = null;
    public void addNode(int data) {
        Node newNode = new Node(data);
        if(head == null) {
            head = tail = newNode;
            head.previous = null;
            tail.next = null;
        }
        else {
            tail.next = newNode;
            newNode.previous = tail;
            tail = newNode;
            tail.next = null;
```

```
    }
}
public void reverse() {
    Node current = head, temp = null;
    while(current != null) {
        temp = current.next;
        current.next = current.previous;
        current.previous = temp;
        current = current.previous;
    }
    temp = head;
    head = tail;
    tail = temp;
}
public void display() {
    Node current = head;
    if(head == null) {
        System.out.println("List is empty");
        return;
    }

    while(current != null) {
        System.out.print(current.data + " ");
        current = current.next;
    }
```

```
    }

    public static void main(String[] args) {

        ReverseList dList = new ReverseList();
        //Add nodes to the list
        dList.addNode(1);
        dList.addNode(2);
        dList.addNode(3);
        dList.addNode(4);
        dList.addNode(5);

        System.out.println("Original List: ");
        dList.display();

        //Reverse the given list
        dList.reverse();

        //Displays the reversed list
        System.out.println("\nReversed List: ");
        dList.display();
    }
}
```

Output:



Python workshop :

Refer the github link for example programs and exercise programs:
https://github.com/anvithapo99/DA-and-ML-workshop