

## DAILY ONLINE ACTIVITIES SUMMARY

<b>Date:</b>	<b>19-06-2020</b>	<b>Name:</b>	<b>Anvitha Poojary</b>
<b>Sem &amp; Sec</b>	<b>6A</b>	<b>USN:</b>	<b>4AL17CS008</b>
<b>Online Test Summary</b>			
<b>Subject</b>	<b>C programming Quiz</b>		
<b>Max. Marks</b>		<b>Score</b>	
<b>Certification Course Summary</b>			
<b>Course</b>	<b>Workshop exercise solving</b>		
<b>Certificate Provider</b>		<b>Duration</b>	
<b>Coding Challenges</b>			
<b>Problem Statement:</b> 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			
<b>Status:</b>			
<b>Uploaded the report in Github</b>		<b>yes</b>	
<b>If yes Repository name</b>		<a href="https://github.com/anvithapo99/Daily-Report">https://github.com/anvithapo99/Daily-Report</a>	
<b>Uploaded the report in slack</b>		<b>yes</b>	

**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

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**Your score has been released for Pointer in C2.**

Pointer in C2

**1 / 4**



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## 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);
```

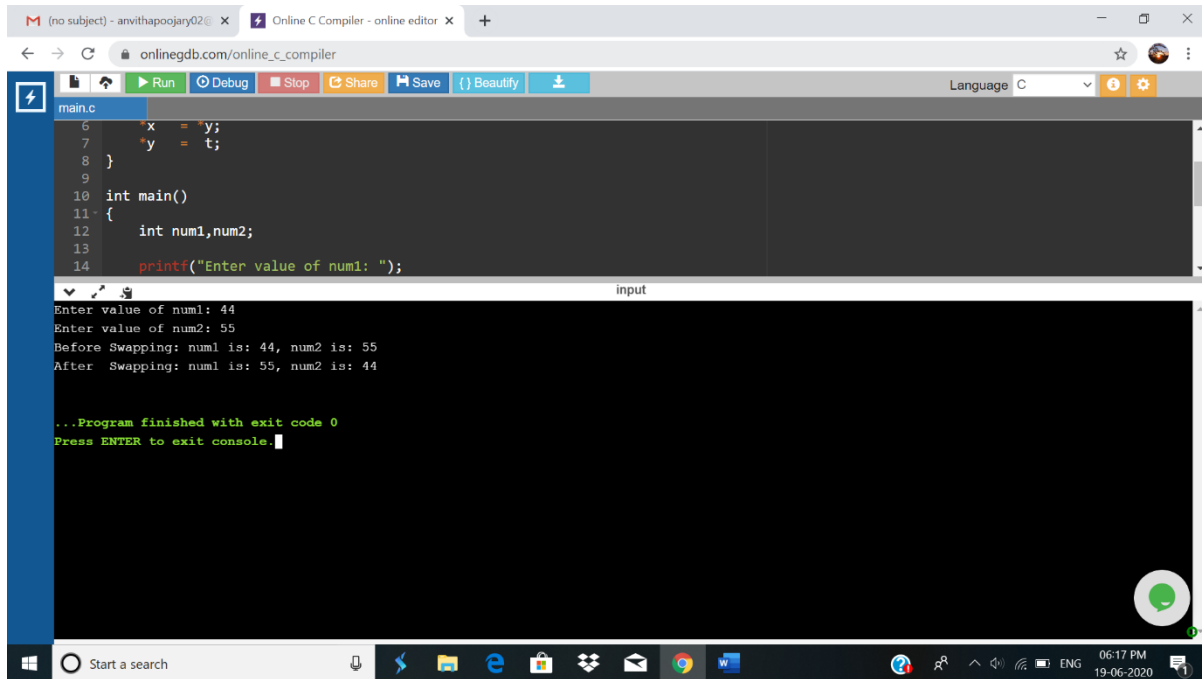
```

return 0;

}

```

## Output:



The screenshot shows a web browser window with the URL `onlinegdb.com/online_c_compiler`. The interface includes a toolbar with buttons for Run, Debug, Stop, Share, Save, and Beautify. The code editor displays the following C code:

```

main.c
6  *x = y;
7  *y = t;
8  }
9
10 int main()
11 {
12     int num1,num2;
13
14     printf("Enter value of num1: ");

```

Below the code editor, the input/output console shows the following text:

```

input
Enter value of num1: 44
Enter value of num2: 55
Before Swapping: num1 is: 44, num2 is: 55
After Swapping: num1 is: 55, num2 is: 44

...Program finished with exit code 0
Press ENTER to exit console.

```

The Windows taskbar at the bottom shows the date and time as 06:17 PM on 19-06-2020.

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

The screenshot shows a web browser window with the URL `onlinegdb.com/online_c_compiler`. The browser tabs include "Online C Compiler - online editor". The compiler interface shows a file named `main.c` with the following code:

```

35 return (n + 1) + countSetBits(n) + m * (1 << (m - 1));
36 }
37 int main()
38 {
39     int n = 3;
40     printf("Total set bit count is %d", countSetBits(n));
41     return 0;
42 }
43

```

The output window shows the result of the program execution:

```

Total set bit count is 4

...Program finished with exit code 0
Press ENTER to exit console.

```

The Windows taskbar at the bottom shows the system time as 06:18 PM on 19-06-2020.

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

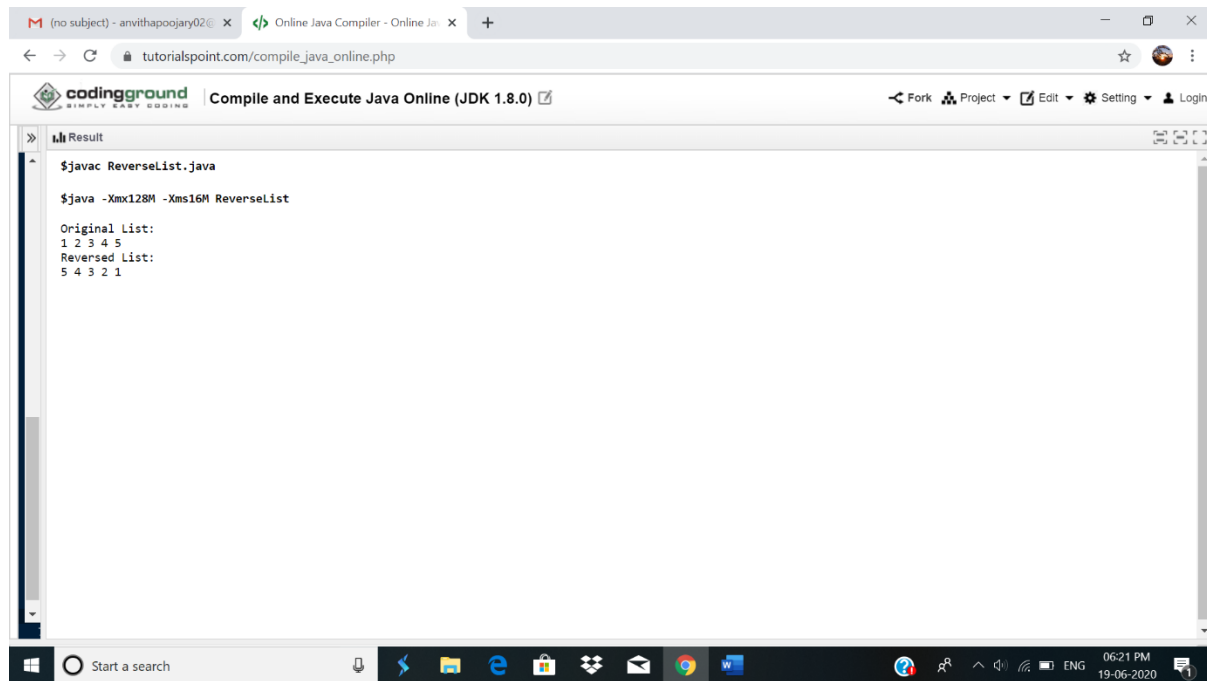
    System.out.println("\nReversed List: ");

    dList.display();

}

}
```

**Output:**



The screenshot shows a web browser window with the URL `tutorialspoint.com/compile_java_online.php`. The page is titled "Compile and Execute Java Online (JDK 1.8.0)". The main content area displays the output of a Java program. The output is as follows:

```
$javac ReverseList.java
$java -Xmx128M -Xms16M ReverseList
Original List:
1 2 3 4 5
Reversed List:
5 4 3 2 1
```

The Windows taskbar at the bottom shows the system clock as 06:21 PM on 19-06-2020.

## Python workshop :

Refer the github link for example programs and exercise programs:

<https://github.com/anvithapo99/DA-and-ML-workshop>