

Logic Building Assignment: 9

Calculate Time Complexity of each program.

1. Write a program which accept range from user and display all numbers in between that range.

```
23
                 35
Input:
Output:
           23
                24
                      25
                            26
                                             29
                                                  30
                                                        31
                                                              32
                                                                   33
                                                                              35
                                 27
                                       28
                                                                         34
Input:
           10
                 18
                                 14
                                       15
Output:
           10
                 11
                      12
                            13
                                             16
                                                  17
                                                        18
                 10
Input:
           10
Output:
           10
Input:
           -10
                2
                -9
                            -7
                                                   -3
                                                        -2
                                                              -1
                                                                              2
Output:
           -10
                      -8
                                                                         1
           90
                 18
Input:
Output:
           Invalid range
#include<stdio.h>
void RangeDisplay(int iStart , int iEnd)
{
     // Logic
}
int main()
{
     int iValue1 = 0, iValue2 = 0;
     printf("Enter starting point");
     scanf("%d",&iValue1);
     printf("Enter ending point");
     scanf("%d",&iValue2);
     RangeDisplay(iValue1, iValue2);
     return 0;
```

2. Write a program which accept range from user and display all even numbers in between that range.



```
Input:
           23
                35
Output:
           24
                26
                      28
                           30
                                 32
                                       34
Input:
           10
                18
Output:
           10
                12
                      14
                           16
                                 18
Input:
           10
                10
Output:
           10
           -10
                2
Input:
Output:
           -10
                -8
                      -6
                                 -2
                                      0
                                            2
Input:
           90
                18
Output:
           Invalid range
#include<stdio.h>
void RangeDisplayEven(int iStart , int iEnd)
{
     // Logic
int main()
{
     int iValue1 = 0, iValue2 = 0;
     printf("Enter starting point");
     scanf("%d",&iValue1);
     printf("Enter ending point");
     scanf("%d",&iValue2);
     RangeDisplayEven(iValue1, iValue2);
     return 0;
}
```

3. Write a program which accept range from user and return addition of all numbers in between that range. (Range should contains positive numbers only)

Input: 23 30 Output: 212

Input: 10 18 Output: 126

Input: -10 2



```
Invalid range
Output:
Input:
           90
                18
          Invalid range
Output:
#include<stdio.h>
int RangeSum(int iStart , int iEnd)
     // Logic
int main()
{
     int iValue1 = 0, iValue2 = 0, iRet =0;
     printf("Enter starting point");
     scanf("%d",&iValue1);
     printf("Enter ending point");
     scanf("%d",&iValue2);
     iRet = RangeSum(iValue1, iValue2);
     printf("Addition is %d",iRet);
     return 0;
}
4. Write a program which accept range from user and return addition of all even
  numbers in between that range. (Range should contains positive numbers only)
           23
Input:
                30
Output:
           108
Input:
           10
                18
Output:
           70
Input:
          -10
                2
Output:
          Invalid range
           90
Input:
                18
Output:
          Invalid range
#include<stdio.h>
int RangeSumEven(int iStart , int iEnd)
```



```
{
     // Logic
}
int main()
{
     int iValue1 = 0, iValue2 = 0, iRet =0;
     printf("Enter starting point");
     scanf("%d",&iValue1);
     printf("Enter ending point");
     scanf("%d",&iValue2);
     iRet = RangeSumEven(iValue1, iValue2);
     printf("Addition is %d",iRet);
     return 0;
}
5. Write a program which accept accept range from user and display all numbers in
  between that range in reverse order.
Input:
           23
                 35
                      33
                            32
                                 31
                                       30
                                             29
                                                  28
                                                        27
                                                             26
Output:
           35
                34
                                                                   25
                                                                         24
                                                                              23
Input:
           10
                 18
Output:
                 17
                      16
                            15
                                 14
                                       13
                                             12
                                                  11
                                                        10
           18
Input:
           10
                 10
Output:
           10
           -10
Input:
                 2
Output:
           2
                 1
                      0
                            -1
                                 -2
                                       -3
                                                  -5
                                                        -6
                                                                              -10
Input:
           90
                 18
Output:
           Invalid range
#include<stdio.h>
void RangeDisplayRev(int iStart , int iEnd)
     // Logic
```

int main()



```
{
     int iValue1 = 0, iValue2 = 0;
     printf("Enter starting point");
     scanf("%d",&iValue1);
     printf("Enter ending point");
     scanf("%d",&iValue2);
     RangeDisplayRev(iValue1, iValue2);
     return 0;
```