Logic Building Assignment: 10

Create separate visual Studio project for each problem statement separately. Calculate Time Complexity of each program.

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

```
Input:
         23
              35
                   25
Output: 23
              24
                        26
                            27
                                  28 29
                                           30
                                                31
                                                     32
                                                          33
                                                              34
                                                                   35
Input:
         10
              18
Output:
         10
              11
                   12
                        13 14 15 16
                                                18
Input:
         10
              10
Output:
         10
Input:
         -10
              2
Output:
         -10 -9
                                  -5
                                            -3
                                                -2
                                                          0
                                                                   2
                   -8
                                                     -1
                                                               1
Input:
         90
              18
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
Input:
          -10
               2
Output:
          -10 -8
                    -6
                               -2
                                         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
Output: Invalid range
          90 18
Input:
Output: Invalid range
#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)

Input: 23 30
Output: 108

Input: 10 18
Output: 70

Input: -10 2
Output: Invalid range

Input: 90 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
                        32 31
Output: 35
              34
                   33
                                  30
                                      29
                                           28
                                                27
                                                     26
                                                          25
                                                               24
                                                                   23
         10
              18
Input:
         18
Output:
              17
                   16 15
                             14
                                 13
                                      12
                                           11
                                                10
Input:
         10
              10
Output:
         10
Input:
         -10 2
Output:
                   0
                        -1 -2 -3
                                           -5
                                                     -7
                                                               -9
         2
              1
                                     -4
                                                -6
                                                          -8
                                                                   -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;
}
```