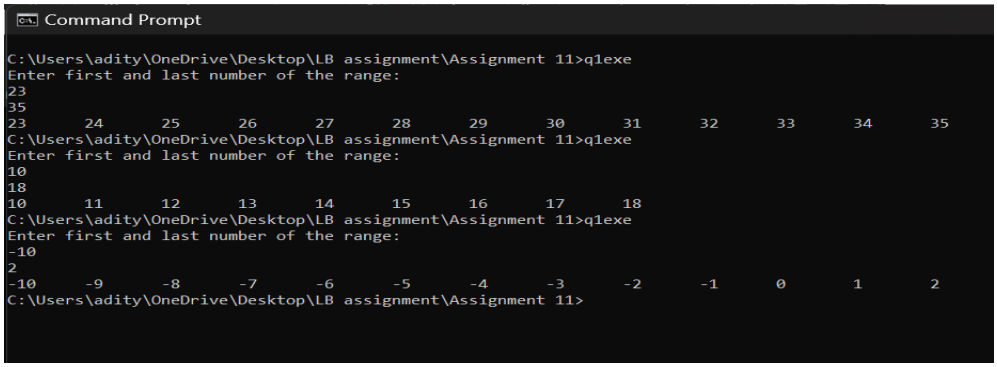
Assignment:11

Q.1 Write a program which accepts a range from user and print numbers in between that range.

Ans.

```c
#include<stdio.h>

void Display(int iVal1, int iVal2)
{
    int iCnt=0;

    iCnt=iVal1;
    while(iCnt<=iVal2)
    {
        printf("%d\t",iCnt);
        iCnt++;
    }
}

int main()
{
    int iNo1=0,iNo2=0;

    printf("Enter first and last number of the range:\n");
    scanf("%d %d",&iNo1,&iNo2);

    Display(iNo1,iNo2);

    return 0;
}
```

OUTPUT:

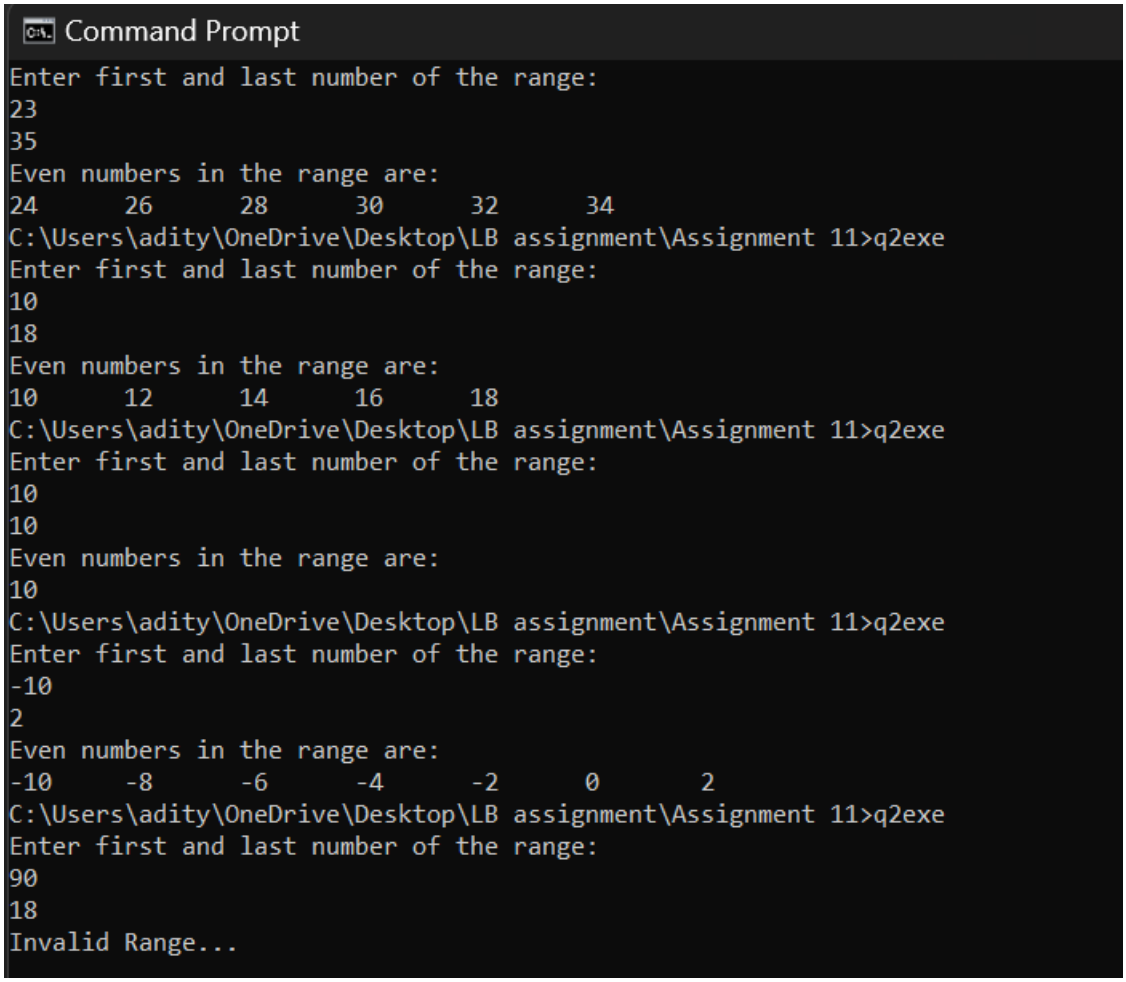


Q.2 Write a program which accepts range from user and display all even numbers between that range.

Ans.

```c
#include<stdio.h>

void Display(int iVal1, int iVal2)
{
    int iCnt=0;

    if(iVal1>iVal2)
    {
        printf("Invalid Range...\n");

    }

    else
    printf("Even numbers in the range are:\n");
    iCnt=iVal1;
    while(iCnt<=iVal2)
    {
        if(iCnt%2==0)
        {
            printf("%d\t",iCnt);
            iCnt+=2;//  N/2
        }
        else
        {
            iCnt++;
        }
    }
}

int main()
{
    int iNo1=0,iNo2=0;

    printf("Enter first and last number of the range:\n");
    scanf("%d %d",&iNo1,&iNo2);

    Display(iNo1,iNo2);

    return 0;
}
```

OUTPUT:



Q.3 Write a program which accepts a range and returns addition of only positive numbers of that range.

Ans.

```c
#include<stdio.h>

int Display(int iVal1, int iVal2)
{
    int iCnt=0;
    int iAdd=0;

    if(((iVal1<0)||(iVal2<0))||(iVal1>iVal2))
    {
        iAdd=-1;
    }
```

```
    else
    {
    iCnt=iVal1;
    while(iCnt<=iVal2)
    {
        iAdd+=iCnt;
        iCnt++;
    }
    }
    return iAdd;
}

int main()
{
    int iNo1=0,iNo2=0;

    printf("Enter first and last number of the range:\n");
    scanf("%d %d",&iNo1,&iNo2);

    int iRet= Display(iNo1,iNo2);
    if(iRet<0)
    {
        printf("Invalid range...");
    }
    else
    {
        printf("Addition of Even numbers in the range is:\n%d",iRet);
    }
    return 0;
}
```

OUTPUT:

```
Command Prompt

C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q3exe
Enter first and last number of the range:
23
30
Addition of Even numbers in the range is:
212
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q3exe
Enter first and last number of the range:
10
18
Addition of Even numbers in the range is:
126
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q3exe
Enter first and last number of the range:
-10
2
Invalid range...
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q3exe
Enter first and last number of the range:
90
18
Invalid range...
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>
```

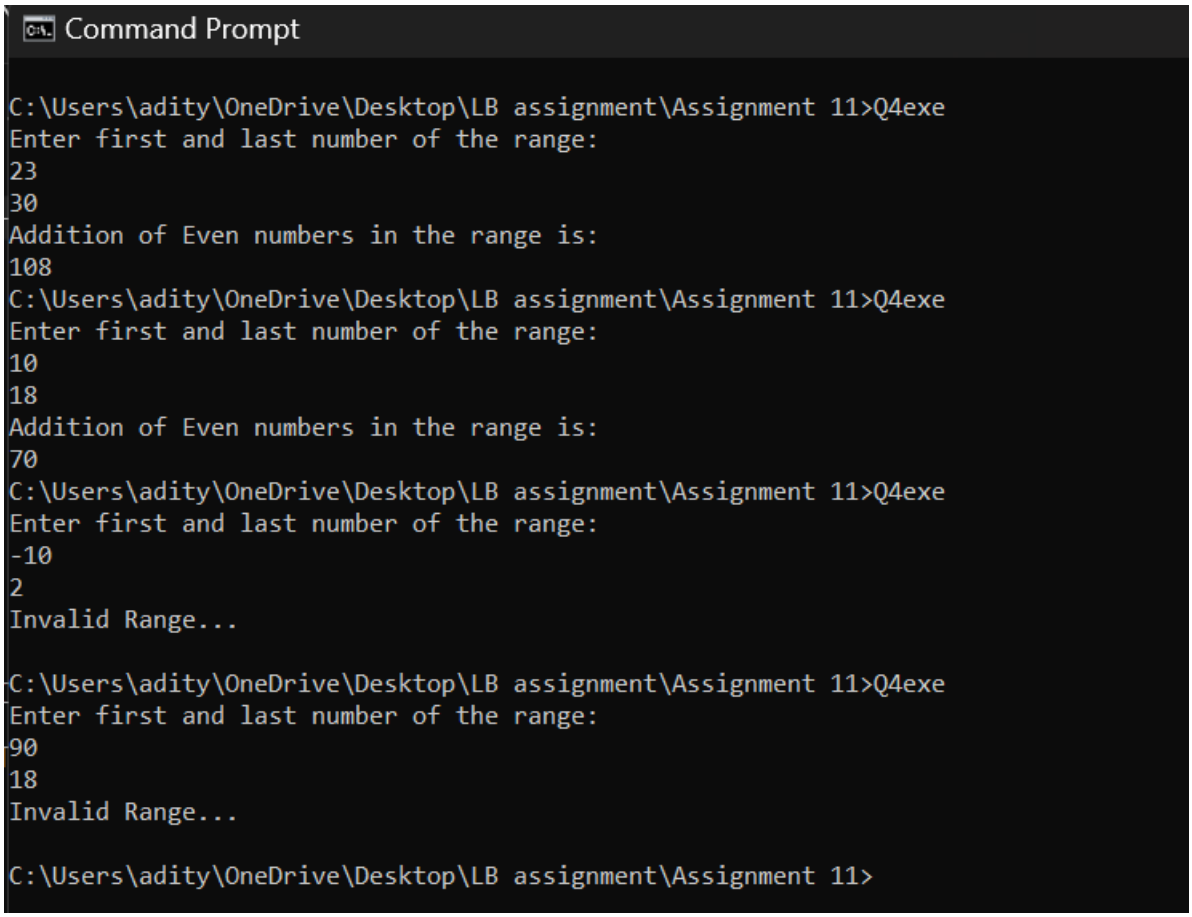
Q.4 Write a program which accepts a range and print addition of even positive numbers of that range.

Ans.

```c
#include<stdio.h>

int Display(int iVal1, int iVal2)
{
    int iCnt=0;
    int iAdd=0;

    if(((iVal1<0)||(iVal2<0))||(iVal1>iVal2))
    {
        iAdd=-1;
    }

    else
    {
    iCnt=iVal1;
    while(iCnt<=iVal2)
    {
        if(iCnt%2==0)
        {
            iAdd+=iCnt;
            iCnt+=2;//  N/2
        }
        else
        {
            iCnt++;
        }
    }
    }
    return iAdd;
}

int main()
{
    int iNo1=0,iNo2=0;
```

```c
    printf("Enter first and last number of the range:\n");
    scanf("%d %d",&iNo1,&iNo2);

    int iRet= Display(iNo1,iNo2);

    if(iRet<0)
    {
        printf("Invalid Range...\n");
    }

    else
    {
        printf("Addition of Even numbers in the range is:\n%d",iRet);
    }

    return 0;
}
```

OUTPUT:

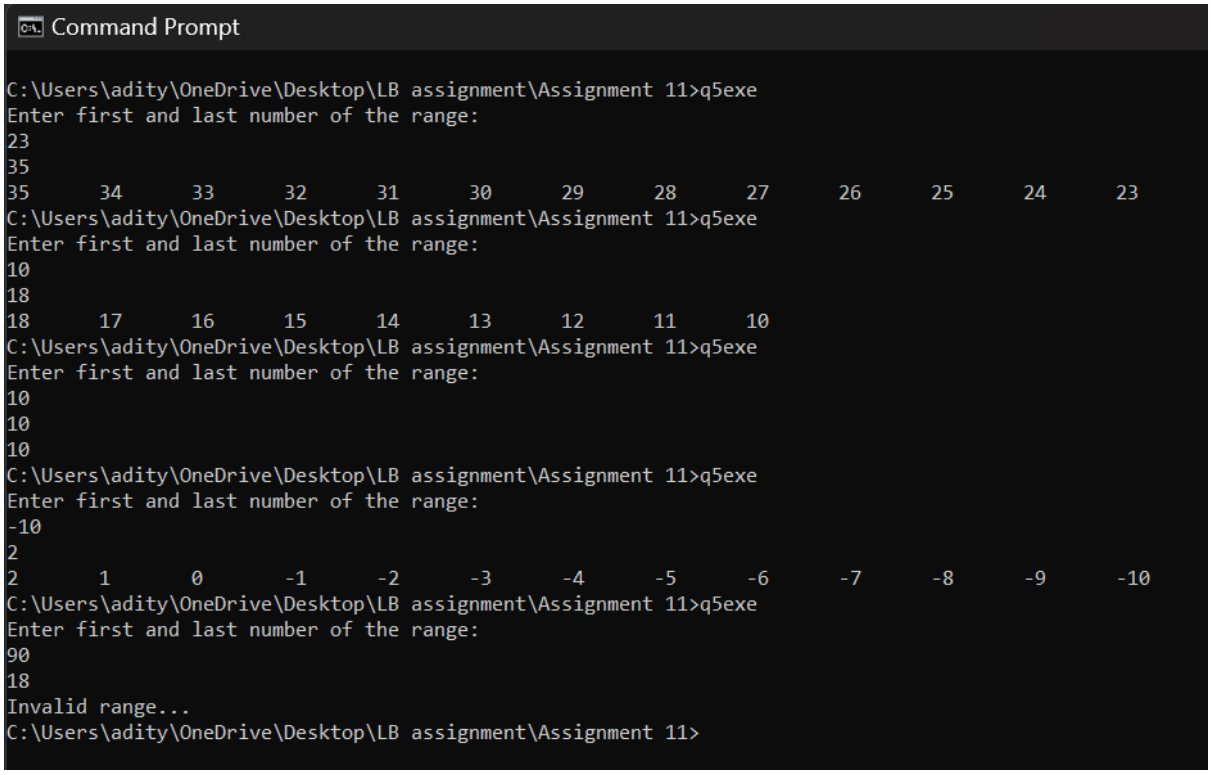


Q.5 Accept a range from the user and print all the numbers in between in reverse order.

Ans.

```
#include<stdio.h>

int Display(int iVal1, int iVal2)
{
    int iCnt=0;

    if(iVal1>iVal2)
    {
       printf("Invalid range...");
    }

    else
    {
    iCnt=iVal2;
    while(iCnt>=iVal1)
    {
        printf("%d\t",iCnt);
        iCnt--;
    }
    }
}

int main()
{
    int iNo1=0,iNo2=0;

    printf("Enter first and last number of the range:\n");
    scanf("%d %d",&iNo1,&iNo2);

    Display(iNo1,iNo2);

    return 0;
}
```

OUTPUT:


Command Prompt
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q5exe
Enter first and last number of the range:
23
35
35 34 33 32 31 30 29 28 27 26 25 24 23
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q5exe
Enter first and last number of the range:
10
18
18 17 16 15 14 13 12 11 10
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q5exe
Enter first and last number of the range:
10
10
10
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q5exe
Enter first and last number of the range:
-10
2
2 1 0 -1 -2 -3 -4 -5 -6 -7 -8 -9 -10
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>q5exe
Enter first and last number of the range:
90
18
Invalid range...
C:\Users\adity\OneDrive\Desktop\LB assignment\Assignment 11>