

Aim:

Write a C program to calculate the series $1 + 2 + 3 + 4 + \dots + n$.

Sample Input and Output:

Enter n value : 10
Sum of 10 natural numbers : 55

Source Code:

series1.c

```
#include<stdio.h>
void main()
{
    int n,i=1,sum=0;
    printf("Enter n value : ");
    scanf("%d",&n);
    while(i<=n)
    {
        sum=sum+i;
        i++;
    }
    printf("Sum of %d natural numbers : %d\n",n,sum);
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter n value : 10
Sum of 10 natural numbers : 55

Test Case - 2
User Output
Enter n value : 14
Sum of 14 natural numbers : 105

Test Case - 3
User Output
Enter n value : 11
Sum of 11 natural numbers : 66

Test Case - 4
User Output
Enter n value : 8
Sum of 8 natural numbers : 36

Test Case - 5
User Output
Enter n value : 99
Sum of 99 natural numbers : 4950

Test Case - 6
User Output
Enter n value : 67
Sum of 67 natural numbers : 2278