

Aim:

Develop a C Program which counts the number of positive and negative numbers separately and also compute the sum of them.

Sample Input and Output:

How many numbers you want to add : 6

Enter number a[0] : 3

Enter number a[1] : 5

Enter number a[2] : -5

Enter number a[3] : 7

Enter number a[4] : -8

Enter number a[5] : 6

Count of positive numbers = 4

Sum of positive numbers = 21

Count of negative numbers = 2

Sum of Negative numbers = -13

Source Code:

count.c

```
#include<stdio.h>
int main()
{
    int i,n,a[20],sump=0,sumn=0,countp=0,countn=0;
    printf("How many numbers you want to add : ");
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        printf("Enter number a[%d] : ",i);
        scanf("%d",&a[i]);
    }
    for(i=0;i<n;i++)
    {
        if(a[i]>0)
        {
            sump+=a[i];
            countp=countp+1;
        }
        else
        {
            sumn+=a[i];
            countn=countn+1;
        }
    }
    printf("Count of positive numbers = %d\n",countp);
    printf("Sum of positive numbers = %d\n",sump);
    printf("Count of negative numbers = %d\n",countn);
    printf("Sum of Negative numbers = %d\n",sumn);
}
```

Execution Results - All test cases have succeeded!

| Test Case - 1 |
|--------------------------------------|
| User Output |
| How many numbers you want to add : 5 |
| Enter number a[0] : 4 |
| Enter number a[1] : 5 |
| Enter number a[2] : 6 |
| Enter number a[3] : 2 |
| Enter number a[4] : 6 |
| Count of positive numbers = 5 |
| Sum of positive numbers = 23 |
| Count of negative numbers = 0 |
| Sum of Negative numbers = 0 |

| Test Case - 2 |
|--------------------------------------|
| User Output |
| How many numbers you want to add : 4 |
| Enter number a[0] : -4 |
| Enter number a[1] : -1 |
| Enter number a[2] : -3 |
| Enter number a[3] : -2 |
| Count of positive numbers = 0 |
| Sum of positive numbers = 0 |
| Count of negative numbers = 4 |
| Sum of Negative numbers = -10 |