```c
//31 Array sum
#include<stdio.h>

int main()
{
    //let's assume the maximum array size as 100.
    //initialize sum as 0. Otherwise, it will take some garbage value.
    int arr[100], size, i, sum = 0;

    //Get size input from user
    printf("Enter array size\n");
    scanf("%d",&size);

    //Get all elements using for loop and store it in array
    printf("Enter array elements\n");
    for(i = 0; i < size; i++)
        scanf("%d",&arr[i]);

    //add all elements to the variable sum.
    for(i = 0; i < size; i++)
        sum = sum + arr[i]; // same as sum += arr[i];

    //print the result
    printf("Sum of the array = %d\n",sum);

    return 0;
}
```
OUTPUT:
Input
array size = 4

Elements = {12, -1, 0, 8}

Output
19