

1D Arrays in C



An array is a container object that holds a fixed number of values of a single type. To create an array in C, we can do `int arr[n];`. Here, `arr`, is a variable array which holds up to **10** integers. The above array is a static array that has memory allocated at compile time. A dynamic array can be created in C, using the `malloc` function and the memory is allocated on the heap at runtime. To create an integer array, *arr* of size *n*, `int *arr = (int*)malloc(n * sizeof(int))`, where *arr* points to the base address of the array.

In this challenge, you have to create an array of size *n* dynamically, input the elements of the array, sum them and print the sum of the elements in a new line.

Input Format

The first line contains an integer, *n*.

The next line contains *n* space-separated integers.

Constraints

$$1 \leq n \leq 1000$$

$$1 \leq a_i \leq 1000$$

Output Format

Print in a single line the sum of the integers in the array.

Sample Input 0

```
6
16 13 7 2 1 12
```

Sample Output 0

```
51
```

Sample Input 1

```
7
1 13 15 20 12 13 2
```

Sample Output 1

```
76
```