

# 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
```