Average of an Array

Given an array, the task is to find average of that array. Average is the sum of array elements divided by the number of elements.

Examples :

```
Input : arr[] = {1, 2, 3, 4, 5}
Output : 3
Sum of the elements is 1+2+3+4+5 = 15
and total number of elements is 5.
So average is 15/5 = 3

Input : arr[] = {5, 3, 6, 7, 5, 3}
Output : 4.83333
Sum of the elements is 5+3+6+7+5+3 = 29
and total number of elements is 6.
So average is 29/6 = 4.83333.
```

Iterative:

Iterative program is easy. We need to find sum and divide sum by total number of elements.

```cpp
// C++ program to calculate average of array elements
#include <iostream>
using namespace std;

// Function that return average of an array.
double average(int a[], int n)
{
    // Find sum of array element
    int sum = 0;
    for (int i=0; i<n; i++)
        sum += a[i];

    return (double)sum/n;
}
```

```
// Driver code
int main()
{
    int arr[] = {10, 2, 3, 4, 5, 6, 7, 8, 9};
    int n = sizeof(arr)/sizeof(arr[0]);

    cout << average(arr, n) << endl;
    return 0;
}
```

Output

6

Time Complexity: O(n)

Auxiliary Space: O(1)