

ARRAY1.CPP source

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/*
 * Q: Read N numbers into an array
 * and print those which are larger than
 * the average
 */

#include <iostream>

using namespace std;

int main() {

    //Defining variables
    int array[100]; //to store umbers entered by user
    int N;          //how many items will be entered
    int avg;        //to store average of numbers in array

    cout<<"How many numbers would you like: ";
    cin>>N;
    cout<<"Enter the numbers:"<<endl;

    //Reading into array[0], array[1],
    //array[2]....., array[N-1]
    for(int i=0; i<N; i++) {
        cin>>array[i];
    }

    avg=0;

    //Average = Sum of all numbers / Total number of items

    //Step 1: Sum of all numbers
    //avg = array[0] + .... + array[N-1]
    for(int i=0; i<N; i++) {
        avg+=array[i];
    }

    //Step 2: Divide by total number of items
    avg/=N;

    cout<<endl<<"The average is: "<<avg<<endl;
    cout<<endl;
    cout<<"The numbers greater than average are:"<<endl;

    //if array[0]>avg, print array[0] ... array[N-1]>avg, print array[N-1]
    for(int i=0; i<N; i++) {
        if(array[i]>avg) cout<<array[i]<<endl;
    }
    cout<<endl;

    //Tell the operating system that everything is OK (exit code 0)
    //More info in higher classes
    return 0;
}
```

ARRAY1.CPP output

How many numbers would you like: 10

Enter the numbers:

1
2
3
4
5
6
7
8
9
10

The average is: 5

The numbers greater than average are:

6
7
8
9
10