

Virginia Tech Local Programming Contest 2007

Sponsored by Evergrid

Informational Handout

Schedule

- 10:00 - Contest Staff open the labs and begins setup
- 11:00 - Practice Problem
- 12:00 - Break for lunch
- 13:00 - Contest Starts
- 17:00 - Contest Ends
- 17:30 - Awards

The schedule might be modified in the event of difficulties.

Account and Machine setup instructions

- 1) First pick a computer. You can use any lab computer in MCB 126 (linux), MCB 118 (windows) or MCB 116 (linux and windows).
- 2) Login to computer using your CSLAB account. If you don't have a CSLAB account, contest staff can help you create one.
- 3) Follow the OS specific instructions for downloading and starting PC².
- 4) Setup the environment as you like it.

Windows PC² Instructions

In a web browser, download this file:

<http://acm.fireduck.com/install/pc2-almond.zip>

Unzip this file wherever you want (desktop is fine) and run start-pc2.bat.

The PC² login window should pop up.

Login with you the team and password you were emailed during registration.

If a Windows firewall window comes up, click to unblock PC².

Linux PC² Instructions

Open a shell terminal and type the following commands:

```
wget http://acm.fireduck.com/install/install-pc2.sh
```

```
sh ./install-pc2.sh
```

```
cd pc2-almond
```

```
./pc2-team
```

The PC² login window should pop up.

Login with you the team and password you were emailed during registration.

Using PC²

PC² is the contest software that allows you to:

- submit solutions to problems ("runs")
- see judge's responses to runs
- submit questions about the problems ("clarifications")
- see answers to clarifications
- see how much time is left in the contest

It is strongly recommend that you leave PC² running during the entire contest so that you receive any global clarifications that are sent.

PC² Judge Responses

After a judge checks a run with the judge's test data (much more exhaustive than the sample), they will get one the following responses:

- Yes - Correct
- No - Wrong Answer (your program did not give the right answer for some test case that we tried)
- No - Output Format Error (read the spec again)
- No - Run-time Error (your program threw an exception or assertion or otherwise crashed)
- No - Time-limit exceeded (your program did not answer a test case quickly enough, this could mean an infinite loop or a poor solution)

PC² Operation

Most operation of PC² is self explanatory. The "Submit" button submits a solution to the judges for grading. The clarification tab allows you to submit questions about problems or the contest in general. General questions can also be addresses to contest staff.

Testing with PC²

The "Test" button allows you to test your program at your computer. It is not required; you can do your testing manually via the command line or in your IDE if you wish.

All problems will involve reading input from standard in and writing output to standard out. When you press the "Test" button, PC² prompts you for a text file that it will redirect to standard input of your program. If compilation is successful, it will show you the output your program gave for the input you selected.

Note: this testing has nothing to do with the judge's data that we will be using to test your program. You are responsible for writing your own test data and verifying that your programs output for that data is correct.

Score Board

At any point during the contest, you may access the contest scoreboard which will be at:

<http://acm.fireduck.com/board/>

Practice Problem

(This is the practice problem that will be done during the practice session)

You are given a list of integers for some reason. Print the sum.

Input

The input may contain multiple test cases.

Each test case starts with an integer N, being the number of integers to follow. N is at least 1 and less than 100: $1 \leq n < 100$

That is followed by N integers in between -1000000 and 1000000.

Input is terminated by an N of 0.

Output

For each input case, output the sum of the integers on its own line

Sample Input

```
3 12 4 1
4 1232 333 -1999 81
0
```

Sample Output

```
17
-353
```

Sample C++ Solution:

```
#include <iostream>
using namespace std;

int main()
{
    while(true)
    {
        int N;
        cin >> N;
        if (N==0) return 0;
        int sum=0;
        for(int i=0; i<N; i++)
        {
            int z; cin >> z;
            sum+=z;
        }
        cout << sum << endl;
    }
}
```

Sample Java Solution:

```
import java.util.Scanner;

public class pract
{
    public static void main(String Args[])
    {
        Scanner in=new Scanner(System.in);
        while(true)
        {
            int N=in.nextInt();
            if (N==0) return;
            int Sum=0;
            for(int i=0; i<N; i++)
            {
                Sum+=in.nextInt();
            }
            System.out.println(Sum);
        }
    }
}
```