
RECURSIVE sum of odd values until an odd value

X97800_en

Write a **RECURSIVE** function such that given an odd integer $n \geq 1$, computes $1 + 3 + 5 + \dots + (n - 2) + n$. Also, write a program that reads several positive odd integers n and shows the result of the function for each of them.

The main function should be of the following form, where `your_function_name` should be replaced by the name you have chosen for the function.

```
int main()
{
    int n;
    while (cin>>n) {
        cout<<your_function_name(n)<<endl;
    }
}
```

Note: A program accepted by the judge that solves the problem without using a **RECURSIVE** function will be considered invalid and will have a final score 0.

Note: Recall that at this point of the course using vectors or any other method to store massive data is not allowed.

Exam score: 2.5 **Automatic part:** 100%

Input

The input has several lines, each one with an odd integer $n \geq 1$.

Output

The output has the result of the function in a different line for each n .

Sample input

1
3
5
7
9

Sample output

1
4
9
16
25

Problem information

Author : Professorat de PRO1

Generation : 2015-11-02 13:00:59

© Jutge.org, 2006–2015.

<http://www.jutge.org>