



## ● Sweets All Around

Attempted by: 388 / Accuracy: 61% / Maximum Score: 30 / ★★★★★ 0 Votes

Tag(s): Algorithms, Basics of Greedy Algorithms, Easy-Medium, Greedy, Greedy Algorithms, Map, Simulation Edit

### PROBLEM

### EDITORIAL

### MY SUBMISSIONS

Students of Delhi Public School love sweets. They prefer eating sweets all the time. To make sure they remain happy their Maths teacher **Pramesh** decided to get sweets for them. But since they are students of Delhi Public School they are not so easily pleased.

A student would become happy if there at least  $X$  sweets in the class and not more than  $Y$  sweets because they know too much of sweets could lead to diabetes. The teacher wants to buy the minimum number of candies so that maximum number of students are happy in his class. Help him in finding out these values.

#### Input:

The first line contains  $N$  indicating the number of students in the class. This is followed up by  $N$  lines where every line contains two integers  $X$  and  $Y$  respectively.

#### Output:

Output two space-separated integers that denote the minimum number of candies and the maximum number of happy students.

#### Constraints:

$$1 \leq N \leq 10^5$$

$$1 \leq X \leq Y \leq 10^9$$

#### SAMPLE INPUT



```
5
3 6
1 6
7 11
2 15
5 8
```

#### SAMPLE OUTPUT



```
5 4
```

## Explanation

The teacher could buy 5 sweets and keep student 1, 2, 4 and 5 happy. He could also keep them happy by buying 6 sweets but we want the minimum value so it is 5.

**Time Limit:** 1.0 sec(s) for each input file.

**Memory Limit:** 256 MB

**Source Limit:** 1024 KB

**Marking Scheme:** Marks are awarded when all the testcases pass.

**Allowed Languages:** C, C++, C++14, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, R(RScript), Racket, Ruby, Rust, Scala, Swift, Visual Basic

## CODE EDITOR

Enter your code or [Upload your code as file.](#)

Save

C++ (g++ 5.4.0)



```
1 // C++ includes used for precompiling -*- C++ -*-
2
3 // Copyright (C) 2003-2013 Free Software Foundation, Inc.
4 //
5 // This file is part of the GNU ISO C++ Library. This library is free
6 // software; you can redistribute it and/or modify it under the
7 // terms of the GNU General Public License as published by the
8 // Free Software Foundation; either version 3, or (at your option)
9 // any later version.
10
11 // This library is distributed in the hope that it will be useful,
12 // but WITHOUT ANY WARRANTY; without even the implied warranty of
13 // MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the
14 // GNU General Public License for more details.
15
16 // Under Section 7 of GPL version 3, you are granted additional
17 // permissions described in the GCC Runtime Library Exception, version
18 // 3.1, as published by the Free Software Foundation.
19
20 // You should have received a copy of the GNU General Public License and
21 // a copy of the GCC Runtime Library Exception along with this program;
22 // see the files COPYING3 and COPYING.RUNTIME respectively. If not, see
23 // <Licenses - GNU Project - Free Software Foundation>.
24
25 /** @file stdc++.h
26  * This is an implementation file for a precompiled header.
27  */
28
29 // 17.4.1.2 Headers
30
```

?

```

31 // C
32 #ifndef _GLIBCXX_NO_ASSERT
33 #include <cassert>
34 #endif
35 #include <cctype>
36 #include <cerrno>
37 #include <cfloat>
38 #include <ciso646>
39 #include <climits>
40 #include <cmath>

```

1:1

☒ Provide custom input

 Press Ctrl-space for autocomplete suggestions.

COMPILE & TEST

SUBMIT

Your Rating:

## PROGRAMMERS WHO SOLVED THIS PROBLEM ALSO SOLVED

### The Infinite String

Attempted By: **744** / Accuracy: **20**

### AltF4, CtrlF4 And The G...

Attempted By: **67** / Accuracy: **23**

### Xsquare And A Fantasti...

Attempted By: **47** / Accuracy: **38**

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