Rewards

This problem is no longer available for practice. Apology for any inconvenience!

Shopee is planning a business development plan. The business development plan has N number of projects, with each project lasting a year. The team will be able to gain some rewards with every completed project, such as Shopee merchandise and vouchers. However, the team is only able to conduct one project per year, and in order to maximise their manpower and schedule, they have decided to set a deadline for every project (with year as the unit).

The team will need to complete each project before the designated deadline, or else, the project will fail and the rewards accorded to the project will be forfeited. Due to the complexity of the business development plan, the team will only consider the success rate of the business development plan based on the total number of rewards earned.

You will now need to algorithmically figure out the maximum possible number of rewards that can be amassed before the deadline.

Input

The first row should include an integer N ($1 \leq n \leq 150000$) to reflect the total number of projects available. The subsequence rows within N will include the integer a_i, b_i, where a_i refers to the deadline for the i th project and the b_i refers to the number of items that the team will receive upon project completion.

 1<=ai<=10^6, and answer is guaranteed in the range of int32

Output

To print an integer of the maximum possible number of rewards that the team can amass.

SAMPLE INPUT

```
6
1 7
3 2
3 1
2 4
2 5
6 1
```

SAMPLE OUTPUT

```
15
```

Explanation

For the 1st year, the correct choice is No. 1 (1, 7) and there are 7 items.
For the 2nd year, choose (2, 5).
For the 3rd year, choose (3, 2). For the 4th year, choose (6, 1).

Time Limit:	1.0 sec(s) for each input file.
Memory Limit:	256 MB
Source Limit:	1024 KB
Marking Scheme:	Score is assigned when all the testcases pass.
Allowed Languages:	Bash, C, C++, C++14, C++17, Clojure, C#, D, Erlang, F#, Go, Groovy, Haskell, Java, Java 8, Java 14, JavaScript(Rhino), JavaScript(Node.js), Julia, Kotlin, Lisp, Lisp (SBCL), Lua, Objective-C, OCaml, Octave, Pascal, Perl, PHP, Python, Python 3, Python 3.8, Racket, Ruby, Rust, Scala, Swift-4.1, Swift, TypeScript, Visual Basic