Artifacts

Input File: artifacts.txt

You are being chased by a horde of hangry raptors! You run through several rooms containing valuable artifacts you want to take. However, since there are raptors chasing you, you can only take one of the two artifacts per room. Each artifact has a value associated with it. You would like to maximize the total value of the artifacts you take.

Input:

An integer c, the total number of rooms.
A line with 2*c space-separated integers, stating the values of the artifacts.

Output:

The largest possible total value of taken artifacts.

Sample Input:

```
4
5 10 17 18 16 16 30 1
```

Sample Output:

```
74
```