

Problem B HUNTING DOG

Time limit: 0.5 seconds

A young, poor farmer has n hunting dogs. Each hunting dog has three attributes: weight, intelligence, and market value. One day, the farmer needs to sell some of his hunting dogs to raise money for his wedding. The farmer has found a billionaire who has enough money to buy the dogs. However, the billionaire wants to select the hunting dogs that satisfy the following condition: two hunting dogs p and q can both be chosen if the weight of dog p is greater than or equal to that of dog q , then the intelligence of dog p must be at least equal to that of dog q and vice versa. Help the farmer choose the hunting dogs to sell in a way that will maximize the total money earned.

Input

- Line 1: one positive integer n ($1 \leq n \leq 10000$)
- Line 2 to $(n+1)$: each line consists of 3 integers separated by spaces, representing the weight, intelligence, and utility value of a hunting dog (the values of the integers are in the range $[1, 10000]$)

Output

A single positive integer is the maximum total market value of the selected hunting dogs

Sample Input	Sample Output
7 2300 7 10 2000 13 40 2800 13 40 2100 11 50 2500 6 20 2600 9 15 2000 17 50	90