

# Dorsey Thief

Mr. Dorsey Dawson recently stole  $X$  grams of gold from ACME Jewellers. He is now on a train back home. To avoid getting caught by the police, he has to convert all the gold he has into paper money. He turns into a salesman and starts selling the gold in the train.

There are  $N$  passengers who have shown interest in buying the gold. The  $i^{th}$  passenger agrees to buy  $a_i$  grams of gold by paying  $\$v_i$ . Dawson wants to escape from the police and also maximize the profit. Can you help him maximize the profit?

**Note:** The  $i^{th}$  passenger would buy **exactly**  $a_i$  grams if the transaction is successful.

## Input Format

The first line contains two space separated integers,  $N$   $X$ , where  $N$  is the number of passengers who agreed to buy and  $X$  is the stolen amount of gold (in grams).  
 $N$  lines follow. Each line contains two space separated integers -  $v_i$  and  $a_i$ , where  $v_i$  is the the value which the  $i^{th}$  passenger has agreed to pay in exchange for  $a_i$  grams of gold.

## Output format:

If it's possible for Dorsey to escape, print the maximum profit he can enjoy, otherwise print "Got caught!" (quotes are for clarity)

## Constraints

- $1 \leq X \leq 5000$
- $1 \leq N \leq 10^6$
- all  $v_i$ 's and  $a_i$ 's are less than or equal to  $10^6$  and greater than 0.

## Sample input #00

```
4 10
460 4
590 6
550 5
590 5
```

## Sample output #00

```
1140
```

## Sample input #01

```
4 9
100 5
120 10
300 2
500 3
```

## Sample output #01

```
Got caught!
```

## Explanation

*Sample Case #00:* Selling it to passengers buying 4 grams and 6 grams would lead to 1050 dollars whereas

selling it to passengers buying 5 grams gold would lead to 1140 dollars. Hence the answer.

*Sample Case #01:* There is no way to sell all 9 grams of gold.