2196.   Nuanran's Idol II

Time Limit: 1.0 Seconds   Memory Limit: 65536K  
Total Runs: 3338   Accepted Runs: 964

You have known that nuanran is a loyal fan of Kelly from the last contest. For this reason, nuanran is interested in collecting pictures of Kelly. Of course, he doesn't like each picture equally. So he gives each picture a score which is a positive integer. And the larger the score is, the more he likes that picture. Nuanran often goes to buy new pictures in some shops to increase his picture collection.

Sometimes nuanran's friends ask him for Kelly's picture and he will choose the picture having the smallest score. Because he has many pictures, this is a boring task. Can you help him again?

**Input**

For each test case, the first line gives an integer n (1 ≤ n ≤ 100000). Then n lines follow, each line has one of the following two formats.

 "B S". Denoting nuanran buys a new picture and S is the score of that picture.

 "G". Denoting nuanran gives a picture to his friends.

The input is terminated when n=0.

**Output**

For each giving test case, you should output the score of the picture nuanran gives to his friends.

**Sample Input**

8

B 20

B 10

G

B 9

G

B 100

B 25

G

0

**Sample Output**

10

9

20

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