

Title: CinemaProblem Statement:

As an avid movie enjoyer, you want to watch the best movies and maximise your enjoyment level, while still keeping your wallet in check. Your wallet initially has an amount of \$0, and will increase by \$X for every salary you receive. Each movie has a price \$P and enjoyment level E.

On certain days, you want to have a movie watching session. You will:

1. Pick the most expensive movie that you are able to watch in your watchlist. If tied, choose the one with the higher enjoyment level.
2. Watch the movie, removing it from the current pool of movies left in your watchlist. Your total money in your wallet decreases by the price \$X of the movie, and your enjoyment level for this session increases by Y.
3. Repeat steps 1 and 2 until you can no longer watch any more movies with the amount of money you have left in your wallet.

There will be n commands of the form:

Command	Description
ADD P E	Add a new movie of price \$P and enjoyment level E to your watchlist.
SALARY X	Add \$X to your wallet. $1 \leq X \leq 10^5$.
QUERY	Begin your movie watching session with 0 enjoyment, and output the total enjoyment level at the end of the session.

Input:

The first line contains an integer N ($1 \leq N \leq 10^6$) denoting the number of commands. Each of the next N lines contains a string S, denoting one of the above commands. For the **ADD** command, two integers will follow, P and E ($1 \leq P, E \leq 10^5$), denoting the price and enjoyment level of the movie.

Output:

For each **QUERY** command, print the total enjoyment level at the end of the session in a new line.

Example:Sample Input:

```
13
ADD 8 10
ADD 3 25
ADD 5 6
SALARY 7
QUERY
```

SALARY 7

QUERY

ADD 1 9

ADD 2 13

SALARY 20

QUERY

SALARY 1

QUERY

Sample Output:

6

10

47

0

Explanation:

On the first query, you have movies: [(8, 10), (3, 25), (5, 6)] and a salary of 7. You pick the most expensive movie that u can afford, which is (5, 6), your salary becomes 2, and you cannot watch any more movies. Your enjoyment level for that query is 6.

Repeating this idea, on the next query you have movies [(8, 10), (3, 25)] with a salary of 9, your final enjoyment level for that session is 10, and so on.