

## Problem O: Take a Number

Each customer arrives at Bimbo's Burgers and takes a number. The customer who arrived earliest (i.e. with lowest time) is served first. If two or more customers arrived at the same time, the one with the lower number is served first.

### Input (from file: o.in):

Input will start with an integer giving the number of customers. This is followed by multiple lines, each describing one customer. Each line contains the customer's number, arrival time, service duration, and name separated by single spaces. Names consist only of letters (no spaces). There will be no more than 30 customers. No two customers will get the same number upon arriving at Bimbo's.

### Output:

Print the time it takes between the time each customer arrives until they are done. The times should be listed in the order in which the customers leave Bimbo's, using the format shown in the example.

### Example:

In this example, Sara arrives at time 4 and receives number 1. Her order will take 60 seconds to complete once she is waited on. Bob arrives at time 9 and receives number 2. His order will take 30 seconds to complete once he is waited on. Tom also arrives at time 9 and receives number 4. His order will take 30 seconds to complete once he is waited on.

Sara arrives first and is served. This takes 60 seconds. Tom and Bob arrive at the same time, but Bob's number is lower, so he is served first. They both wait until Sara is done. This takes 55 seconds, since they arrived 5 seconds after Sara's order was started. Then Bob is served during the next 40 seconds and then Tom is served for the next 30 seconds. So Bob took  $55 + 40 = 95$  seconds, while Tom took  $55 + 40 + 30 = 125$  seconds.

### Sample Input:

```
3
1 4 60 Sara
4 9 30 Tom
2 9 40 Bob
```

### Sample Output:

```
Sara took 60 seconds.
Bob took 95 seconds.
Tom took 125 seconds.
```

