ASTU ICPC Club Prob:Grocery Help

Your company, Calculation Solutions, which specializes in accounting software, has been contacted by the shemsu Grocers for help.

At the end of each day at the grocery store, the owner, Mr. shemsu has a list of transactions. Each transaction is of the form:

- 1) p q: which means q items costing p dollars each were sold.
- 2) p: which means an item costing p dollars was sold.
- 3) -p: which means an item costing p dollars was returned.

Mr. shemsu would like for you to help him by generating the revenue his store had on each day.

Input

The first line contains an integer N ($1 \le N \le 100$), the total number of days. Each day starts with an integer T ($0 \le T \le 100$) on a line, T being the total number of transactions on that day. It is followed by T lines containing transactions of type 1, 2 or 3. Since Mr. Patel's store is mid-sized, p and q are relatively small ($1 \le p$, $q \le 10$). The transactions are in the format: "1 p q", "2 p" or "3 -p" (quotes for clarity).

Output:

For each day D (D=1 .. N), output the revenue R for that day in the format. Day D: \$R.

Sample Input

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3
2
1 4 5
2 6
1
3 -7
```

Sample Output

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Day 1: $26.
Day 2: $-7.
Day 3: $0.
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