10. Spring Trip

Program Name: Spring.java Input File: spring.dat

The band is selling cookie dough to raise money for their spring trip to the coast. Cookie dough is sold in packages for $14 each and in tubs for $15 each.

Each member must raise $500 for his portion of the trip and can get credits toward raising his $500 as follows:

- For each for each package of cookie dough that a member sells, he gets a credit of 48% of the money collected toward his share of the trip.
- For each tub of cookie dough that a member sells, he gets a credit of 45% of the money collected toward his share of the trip.
- For any donation that a member receives, he gets a credit of 100% of the money donated toward his share of the trip.

You are to write a program that will compute the amount of money that each member has raised.

Input

The first line of input will contain a single integer `n` that indicates the number of students in the band. For each student:

- The first line will contain the member's first name and a space followed by single integer `t` ≥ 0 that indicates the number of transactions that that member has.
- Each of the following `t` lines will contain one transaction consisting of up to three codes that will identify the sales for that transaction.
    - The codes will indicate the type of item and how many of that item the member sold or the amount of a donation received.
        - The code types are a `P` (a package of cookie dough), a `T` (tub of cookie dough), or a `D` (a donation)
        - Each type will be followed immediately (no space) by how many of the items he sold or the integer amount of the donation he received.
    - The codes will be separated by a space.

Output

For each student, and in the order the students appear in the data file, you will output the student's name and a space followed by the amount of money that he has left to raise. If he has raised more than $500, you will print his name, a space and `OVER` followed by the amount of extra money he raised. The money output should be preceded by a `$` and rounded to the nearest penny. Do not round until all mathematical operations are complete.

Example Input File

```
3
STEVE 4
T3 P5 D100
T4 D25
P3 T4
D100
MARY 3
D300 T3 P5
T8 P8
P10
JOE 5
P20 D10 T25
T5 P10 D15
D25
P20
D100
```

10. Spring Trip (cont.)

Example Output to Screen

```
STEVE $146.99
MARY OVER $28.81
JOE OVER $188.50
```