Program Name: biath1.java   Input File: biath1.in

Calculate the times of competitors in an Olympic biathlon and award the gold, silver, and bronze medals.

The biathlon is an Olympic event with two components, cross-country skiing and rifle shooting. In the women's individual competition, competitors race 15km. All competitors stop four times at the firing range and must fire once at each of five targets. For each target missed, one minute is added to their total time.

Given the wall-clock time required for competitors to complete the course and the hit/miss results for their 20 firing range targets, calculate the total time for each competitor and determine the medal recipients by comparing the total times.

Input
The first line of input will contain a single integer *n* indicating the number of data sets to process. The remainder of the input consists of those *n* data sets.

Each data set will consist of:
1. A line containing a single integer, *m*, indicating the number of competing athletes (always at least 3).
2. One line for each athlete, containing the following space-separated tokens:
   - Name – no more than 20 characters
   - Wall-clock Time – number of seconds between course start and stop times, given to the nearest hundredth of a second.
   - Targets Hit – number of targets that were hit.

Output
For each data set in the input display the following:
1. A single line, "Data Set #X" where X is 1 for the first data set, 2 for the second, etc.
2. One line for each athlete, in the same order as in the input, consisting of the following space-separated tokens:
   - Name
   - Total Time (Wall-clock Time + penalty time for missed targets) to the hundredth of a second
   - If the athlete receives a medal, display 'GOLD', 'SILVER', or 'BRONZE', as appropriate.

Note: There will be no ties.

Example Input File
```
2
3
Beth 2500.95 18
Laura 2550.73 19
Holly 2400.33 15
4
Beth 2500.95 18
Laura 2550.73 19
Holly 2400.33 15
Zippy 1000.80 0
```
Example Output To Screen
```
Data Set #1
Beth 2620.95 SILVER
Laura 2610.73 GOLD
Holly 2700.33 BRONZE
Data Set #2
Beth 2620.95 BRONZE
Laura 2610.73 SILVER
Holly 2700.33
Zippy 2200.80 GOLD
```