Problem J: Caffeine!

The Associated Coffee Makers company has responded to its customers' desire for varying levels of caffeine by providing its coffee blend in four caffeine levels. Since the caffeine content of bean crops may vary, the quality assurance group tests a sample from each batch before packaging, to ensure the coffee is categorized correctly.

You will write a program to automatically calculate each batch's caffeine concentration and classify the batch into the correct packaging category.

The caffeine concentration is calculated by dividing the milligrams of caffeine found by the grams of coffee beans tested. The coffee is classified into the following categories:

Category Name	Caffeine Level (in mg Caffeine / g Beans)
Sleepy Time	x < 0.5
Morning Wakeup	0.5 <= x < 1.0
Coder's Delight	1.0 <= x < 2.0
Jitter Juice	2.0 <= x

Input (from file j.in)/Output (to stdout)

Your input will provide all information needed to perform this task. The first line of input will contain the number of batches tested. Each following line will contain the record of information of one of the batches. A batch's record will contain the batch ID (an integer), followed by a tab, followed by the milligrams of caffeine found, followed by a tab, followed by the number of grams of beans tested. (Batch IDs can range between 10 and 99, inclusively.)

Your program will write to standard out (the monitor) one line of output for each batch. It will output the word "Batch" followed by a space, followed by the batch ID. It will then output a tab character, followed by the category name. The example below shows the appropriate format:

```
Batch 12    Sleepy Time
Batch 34    Jitter Juice
```

Example Input

```
5
10   12.5       85.23
89   0.031      15.2
15   163.2567   50
20   18.111     21.5
33   77.12      250
```

Example Output

```
Batch 10  Sleepy Time
Batch 89  Sleepy Time
Batch 15  Jitter Juice
Batch 20  Morning Wakeup
Batch 33  Sleepy Time
```