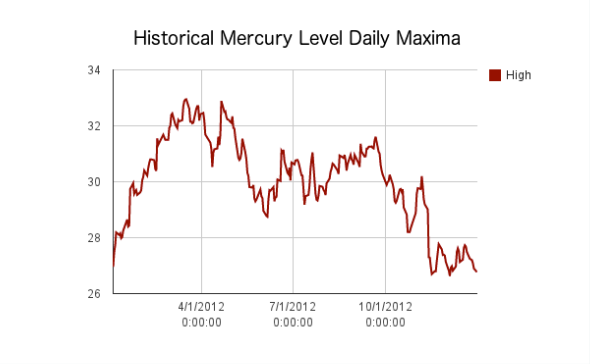
2. Filling in Data



A time series of daily readings of mercury levels in a river is provided to you. In each test case, the day's highest level is missing for certain days. By analyzing the data, try to identify the missing mercury levels for those days. Each row of data contains two tab-separated values: a time-stamp and the day's highest reading.

There are **exactly twenty** rows marked missing in each input file. The missing values are marked as "Missing_1", "Missing_2", ..., "Missing_20". These missing records have been randomly dispersed in the rows of data.

Function Description
Complete the *calcMissing* function in the editor below. It should print *20* rows, one for each missing value, as floats.

Constraints
Mercury levels are all *< 400*.

▼ Input Format for Custom Testing

The first line contains an integer *n*, the number of rows of data to follow.
Each of the next *n* lines contains a string of data in the format described.

▼ Sample Case 0

Sample Input 0

```
250
1/3/2012 16:00:00  Missing_1
1/4/2012 16:00:00  27.47
1/5/2012 16:00:00  27.728
1/6/2012 16:00:00  28.19
1/9/2012 16:00:00  28.1
1/10/2012 16:00:00 28.15
....
....
....
12/13/2012 16:00:00 27.52
12/14/2012 16:00:00 Missing_19
12/17/2012 16:00:00 27.215
12/18/2012 16:00:00 27.63
12/19/2012 16:00:00 27.73
12/20/2012 16:00:00 Missing_20
12/21/2012 16:00:00 27.49
12/24/2012 13:00:00 27.25
12/26/2012 16:00:00 27.2
12/27/2012 16:00:00 27.09
12/28/2012 16:00:00 26.9
12/31/2012 16:00:00 26.77
```

Sample Output 0

```
26.96
31.98
32.69
32.41
32.32
30.5
29.18
30.8
30.46
30.63
30.96
30.4
28.2
28.2
27.3
27.1666
27.58
26.82
27.13
27.68
```

Scoring
We will compute the mean of the magnitude of the percentage difference by comparing your expected answers with the actual mercury level high for each of the missing records (in all test cases - samples included).
For all missing values we calculate,
d = Summation of **abs**((expected_value[i] - computed_value[i]) / expected_value[i]) x 100
Then we take the average of d.
d = d/(number of missing values)

Your final score on a scale of 100 will be: **50 x max(2 - d, 0)**

That is, if the mean value of 'd' exceeds 2% (your predictions are off by 2% or more on average), you will score a zero. If your predictions are all right on target, you will score 100.

If your program throws an error (or an incorrect output format) for a single test case, the overall score assigned will be zero.