**Updating Median**

You must write a program that will find the median in an updating list of integers! The following actions will be called:

* “add [number]”: you will add the given number to the end of the list.
* “median”: you will output the current median.

**Input:** The first line of input contains **Q**, the number of queries that will be made. The next **Q** lines will each contain either “add” or “median”. If it is “add”, then there will be a number following the “add”. If it is “median” there will be nothing following after it.

**Output:** For each “median” call, you will output “Median #(median call number): “ followed by the current median.

**Example Input:**

6

add 2

add 3

add 4

median

add 12

median

**Example Output:**

Median #1: 3

Median #2: 3.5