



## B • Comfy Deviations

According to *Wikipedia*, *standard deviation* is a number used to tell how measurements for a group are spread out from the average (mean or expected value). A low *standard deviation* means that most of the numbers are close to the average, while a high *standard deviation* means that the numbers are more spread out. For this problem, you will read in 10 temperature values and use the *standard deviation* to determine if values are close to the mean temperature. The formula for calculating the standard deviation is:

$$s_t = \sqrt{\frac{\sum_{i=1}^n (t_i - \bar{t})^2}{n - 1}}$$

$s_t$  = Standard deviation of temperature values

$n$  = The number of data points (10 in this case)

$t_i$  = Each of the input temperature values

$\bar{t}$  = The average (mean) of all 10 input values.

### Input

Input consists of a single line containing 10 space separated floating point values representing the temperature values to check.

Each temperature value,  $t_1 .. t_{10}$  will be in the range ( $68 \leq t \leq 80$ )

### Output

The output consists of a single line that has the string `COMFY` if the standard deviation of the input values is  $\leq 1.0$  or `NOT COMFY` if the standard deviation of the input values is  $> 1.0$ .

Sample 1:

Sample Input	Sample Output
79 78 78 79 79 77 78 78 77 78	COMFY

Sample 2:

Sample Input	Sample Output
68.2 68 69.0004 68 69.8 70.123 72 73.10009 74 75.0	NOT COMFY

Note: The **Sample Input** for **Sample 2** is one single line. It is wrapped to two lines above so it fits in the table.