# Problem 10 – Keep The Change

Don Vlado likes to eat at expensive restaurants. In such restaurants it is accepted that a customer should tip (leave extra change when paying his bill). However, don Vlado happens to be very stingy and wants to spare every penny he can when tipping at his favorite restaurant. Help him by **calculating his exact tip**!

Don Vlado's tip very much depends on his **mood**:

* When *happy*, don Vlado tips for 10% of the bill
* When *married*, don Vlado tips for 0.05% of the bill
* When *drunk*, don Vlado tips for (15% of the bill)**n**, where **n** is the **first digit** of the tip. (e.g. if the bill is 200, **30** is **15% of the bill**. **3** is the **first digit of 30**, so Don Vlado leaves the tip **303 = 30 \* 30 \* 30 = 27000**)
* In every other scenario, don Vlado is simply grumpy and tips for only 5% of the bill

### Input

The input data will be received as an **array**. It contains two arguments – the first one is don Vlado’s **bill**. The second one is **don Vlado’s mood**.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

The output consists of only one line – don Vlado’s tip, **rounded to 2 places after the decimal point**. Use the **toFixed()** function.

### Constraints

* The billwill be a number no greater than 100000.
* Time limit: 0.3 sec. Memory limit: 16 MB.

### Examples

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 120.44  happy | 12.04 | 1230.83  drunk | 184.62 | 716.00  bored | 35.80 |