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The Virtual Learning Environment for Computer Programming

Interest (1) P85370_en

Given an initial capital c in euros, an annual interest rate i (expressed in %), a time t in years and an indication whether the interest is simple or compound, determine the amount of euros the initial capital is transformed into.

Input

The input consists of two strictly positive real numbers c and i, followed by a strictly positive integer t, followed by either the word "simple" or the word "compound".

Output

Write the final capital with 4 decimal places.

Observation

If you program in C++, use the double data type and put these two lines at the beginning of your main():

```
cout. setf ( ios :: fixed );
cout. precision (4);
```

Sample input 1

1000 3 2 simple

Sample input 2

1000 3 2 compound

Sample input 3

1234.5 5.1 22 compound

Sample output 1

1060.0000

Sample output 2

1060.9000

Sample output 3

3687.6598

Problem information

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