# Jutge.org

The Virtual Learning Environment for Computer Programming

### CO2 emissions by activity

X66096\_en

Annual worldwide CO2 emission data can be downloaded from https://ourworldindata.org. For instance, data of greenhouse gas emissions in gigatons of last five years is:

```
2021 36.4
2020 34.81
2019 36.7
2018 36.65
2017 35.93
```

Remember that 1 gigaton is  $10^9$  tones, or  $10^{12}$  kg.

Bill Gates claims in his book *How to avoid a climate disaster* that there are five activity areas involved in CO2 emissions and provides the following table that shows the pollution contribution of each activity as a percentage:

```
making things 31% pluggin in 27% growing things 19% getting around 16% keeping warm and cold 7%
```

Write a program that given the gas emissions of a year and an activity, outputs the amount of emissions due to the activity during the year.

Exam score: 3.0 Automatic part: 40%

#### Input

The input consist of three data. First, an integer representing a year. Second, a double with the amount of gas emissions in gigatons during the year and finally, a string denoting an activity. The string is always one in the list making\_things, pluggin\_in, growing\_things, getting\_around, keeping\_warm\_and\_cold.

#### Output

2018 36.65 pluggin\_in

A sentence providing the emissions in gigatons due to the activity in the year. See the examples below. Write the gigaton value using two decimal places.

# Sample input 1 2021 36.4 making\_things Sample output 1 Making things produced 11.28 CO2 Gt in 2021 Sample input 2 Sample output 2

Pluggin in produced 9.90 CO2 Gt in 2018

#### Observation

To write double values using two decimal places, insert the following two lines at the beginning of the main()

```
cout.setf(ios::fixed);
cout.precision(2);
```

## **Problem information**

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