Jutge.org

The Virtual Learning Environment for Computer Programming

Rational numbers (2)

P84584_en

Using the same definition of the rational numbers as in problem P85696, write a function with two output parameters:

```
void read_rational (Rational&r, bool& end);
```

that tries to read a rational number represented by two integer numbers (the numerator and the denominator), returns the corresponding "normalized" rational according to the same convention that in the exercise: "", and prints if the two integer have been read. *end* must be **true** if and only if have not been read (because the input has finished). The value of r is irrelevant when *end* is true.

Precondition

None of the read denominators will be 0.

Write also a procedure

```
void print_rational (const Rational& r);
```

that prints the rational r with the format r.num/r.den, unless the denominator is 1, case in which print only the numerator. Do not print any intermediate space nor any jump line at the end.

Precondition

The rational r is correct and it is already normalized.

Observation

You only need to submit the required classes; your main program will be ignored. Strictly obey the type definitions of the statement.

Problem information

Author : Salvador Roura Translator : Carlos Molina

Generation: 2016-12-16 12:04:50

© *Jutge.org*, 2006–2016. http://www.jutge.org