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The Virtual Learning Environment for Computer Programming

Read a rational number (2)   P93157_en

Write a procedure

bool *read_rational* (**int**& *num*, **int**& *den*);

that tries to read a rational number given in the form "numerator"/"denominator", and stores these two values in *num* and *den*, respectively. Additionally, you must remove all common factors from *num* and *den*. Furthermore, if the input had a rational number, you must return `true`; otherwise you must returna `false`. For instance, this code

```
int num, den;
while ( read_rational (num, den)) cout << num << ' ' << den << endl;
```

with this input

```
66/12
100/100
```

should print

```
11 2
1 1
```

Precondition

$1 \leq num \leq 10^9$ and $1 \leq den \leq 10^9$

Observation

You only need to submit the required procedure; your main program will be ignored.

Problem information

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