Rational numbers

In this question, we are going to define the mechanism of rational numbers with the help of structures.

You know that every rational number consists of a numerator and a denominator. So, define a struct that has two correct fields, numerator and denominator, for example:

```
struct Rational {
    int a;
    int b;
};
```

Then implement the following functions based on this structure:

```
void get(Rational *i);
```

This function receives the numerator and denominator of a number and stores it in the input argument.

```
void print(Rational o);
```

Questions

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This function receives a rational number as an argument and prints it as (denominator/numerator).

```
void simplify(Rational *q);
```

This function takes a rational number and simplifies it.

```
Rational add(Rational q1, Rational q2);
```

This function receives two rational numbers and returns their sum in the simplest possible way.

```
Rational subtract(Rational q1, Rational q2);
```

This function receives two rational numbers and returns the result of their subtraction in the simplest possible way.

```
Rational multiply(Rational q1, Rational q2);
```

This function receives two rational numbers and returns their product in the simplest possible way.

```
Rational division(Rational q1, Rational q2);
```

This function receives two rational numbers and returns their product in the simplest possible way.

Then write the main function so that its input and output are as follows:

entrance and exit

The input to your program is a number of commands that end with the end command.

The first command is as follows:

```
new <lowercase letter>
```

With this command, the program receives a rational number and assigns it to a small English letter entered in the command.

Other commands are as follows:

```
a+b
a-b
a*b
a/b
a
```

The first command displays the product of addition, the second command displays the result of subtraction, the third command displays the product of multiplication, the fourth command displays the result of dividing two rational numbers a and b, and the last command displays the number a itself.

Sample input

```
new a
1
```

```
2
new b
4
6
a+b
a/b
a
end
```

Sample output

```
7/6
3/4
1/2
```

Important note: It may seem that this program is difficult and long at first, but if you code optimally, the size of your code will be greatly reduced. In addition to the correct functioning of the code, the condition of getting a full score in this question is the fundamentals of writing the code.

POST AN ANSWER TO THIS QUESTION

.The training period is over


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