

## Fraction to Recurring Decimal

Try to solve the Fraction to Recurring Decimal problem.

### We'll cover the following ^

- Statement
- Examples
- Understand the problem
- Figure it out!

### Statement

Given the two integer values of a fraction, `numerator` and `denominator`, implement a function that returns the fraction in string format. If the fractional part repeats, enclose the repeating part in parentheses.

#### Constraints:

- `denominator`  $\neq 0$
- $-2^{31} \leq \text{numerator}, \text{denominator} \leq 2^{31} - 1$

### Examples

#### Sample example 6

##### Input

```
numerator = -5
```

```
denominator = 333
```

##### Output

```
-5/333 = -0.015015015 = "-0.(015)"
```

6 of 6



### Understand the problem

Let's take a moment to make sure you've correctly understood the problem. The quiz below helps you check if you're solving the correct problem:

Fraction to Recurring Decimal

1

Select the correct answer for the fraction given below:



20/4

A) "2"

B) "3"

C) "4"

D) "5"

Submit Answer



Question 1 of 3  
0 attempted



Reset Quiz ↻

## Figure it out!

We have a game for you to play. Rearrange the logical building blocks to develop a clearer understanding of how to solve this problem.



Drag and drop the cards to rearrange them in the correct sequence.

Declare a result variable to store the result in the form of a string. In addition, declare a hash map to store the remainder as the key and its length as its corresponding value.

If the numerator or denominator is negative, append the minus character to the result string and make the numerator and denominator positive.

If the numerator is zero, simply return 0.

Calculate the quotient and remainder from the given numerator and denominator.



Append the quotient to the result.

Check if the remainder is 0, and then return the result.

If the remainder is not 0, then append the dot "." to the result.

Start a loop until the remainder is 0 and, at every time check the remainder in the hash map. If the remainder already exists in the hash map, create the recurring decimal from the fraction. If the remainder does not exist in the hash map, put it in the hash map.

Reset

Show Solution

Submit



usercode > main.java

```
1 import java.util.*;
2
3 public class Main{
4     public static String fractionToDecimal (int numerator, int denominator) {
5         // Write your code here
6         return "";
7     }
8 }
```

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Test Cases

Results

Case 1

Case 2

Case 3

Input #1

2

Input #2

4

Fraction to Recurring Decimal



[← Back](#)

Solution: Design Hash...

[Next →](#)

Solution: Fraction to R...

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