

# 166. Fraction to Recurring Decimal

## Description

Given two integers representing the `numerator` and `denominator` of a fraction, return *the fraction in string format*.

If the fractional part is repeating, enclose the repeating part in parentheses.

If multiple answers are possible, return **any of them**.

It is **guaranteed** that the length of the answer string is less than `104` for all the given inputs.

### Example 1:

```
Input: numerator = 1, denominator = 2
Output: "0.5"
```

### Example 2:

```
Input: numerator = 2, denominator = 1
Output: "2"
```

### Example 3:

```
Input: numerator = 4, denominator = 333
Output: "0.(012)"
```

### Constraints:

- `-231 ≤ numerator, denominator ≤ 231 - 1`
- `denominator != 0`

