

## **166. Fraction to Recurring Decimal**

- 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:**

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