Problem Link:

<https://leetcode.com/problems/fraction-to-recurring-decimal/description/?envType=daily-question&envId=2025-09-24>

Solution:

class Solution {

public:

string fractionToDecimal(int numerator, int denominator) {

if(numerator == 0)

return "0";

string s;

if((numerator < 0) ^ (denominator < 0))

s += '-';

long long n = llabs((long long)numerator);

long long d = llabs((long long)denominator);

s += to\_string(n / d);

long long r = n % d;

if(r == 0)

return s;

s += '.';

map<long long, int> m;

while(r != 0)

{

if(m.count(r))

{

s.insert(m[r], "(");

s += ')';

break;

}

m[r] = s.size();

r \*= 10;

s += to\_string(r / d);

r %= d;

}

return s;

}

};