**Greatest Common Divisor of Strings**

For two strings s and t, we say "t divides s" if and only if s = t + ... + t (i.e., t is concatenated with itself one or more times).

Given two strings str1 and str2, return *the largest string*x*such that*x*divides both*str1*and*str2.

**Example 1:**

**Input:** str1 = "ABCABC", str2 = "ABC"

**Output:** "ABC"

**Example 2:**

**Input:** str1 = "ABABAB", str2 = "ABAB"

**Output:** "AB"

**Example 3:**

**Input:** str1 = "LEET", str2 = "CODE"

**Output:** ""

Solution: class Solution {

    public String gcdOfStrings(String str1, String str2) {

        if(!(str1+str2).equals(str2+str1))

        {

            return "";

        }

        int commonLength = gcd(str1.length(), str2.length());

        return str1.substring(0,commonLength);

    }

    private int gcd(int a,int b)

    {

        return b==0 ? a:gcd(b,a%b);

    }

}