

## 1071. Greatest Common Divisor of Strings

Easy

Topics

Companies

Hint

For two strings  $s$  and  $t$ , we say " $t$  divides  $s$ " if and only if  $s = t + t + t + \dots + t + t$  (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:**  $str1 = \text{"ABCABC"}, str2 = \text{"ABC"}$   
**Output:**  $\text{"ABC"}$

Example 2:

**Input:**  $str1 = \text{"ABABAB"}, str2 = \text{"ABAB"}$   
**Output:**  $\text{"AB"}$

Example 3:

**Input:**  $str1 = \text{"LEET"}, str2 = \text{"CODE"}$   
**Output:**  $\text{""}$

Constraints:

- $1 \leq str1.length, str2.length \leq 1000$
- $str1$  and  $str2$  consist of English uppercase letters.