LEETCODE | 1071|

Greatest Common Divisor of Strings

Input 1: str1 = "ABCABC"

Str2 = "ABC"

Output 1: "ABC"

Input 2: str1 = "ABABAB"

str2 = "ABAB"

Output 2: "AB"

Intuition For GCD between str1 & str2 if anything can be common then

$$str1 + str2 == str2 + str1 \quad (1$$

Case 1 If (str1 + str2 . equals (str2 + str1)) {

we can proceed for further checks

{

else {

return " "; // empty string

}

Case 2 int len1 = str1.length()

int len2 = str2.length()

Find GCD of len1 & len2

For Input 2 → len1 = 6, len2 = 4

GCD = 2

Return Str1. substring (0, gcd)

or

Str2. substring (0, gcd)