

```
def interleave_strings(word1, word2):
    result = ""
    for a, b in zip(word1, word2):
        result += a + b
    return result
```

```
word1 = "abc"
word2 = "pqr"
output = interleave_strings(word1, word2)
print(output)
```

↩ apbqcr

```
def interleave_strings(word1, word2):
    result = ""
    for a, b in zip(word1, word2):
        result += b + a
    return result
```

```
word1 = "ab"
word2 = "pqrs"
output = interleave_strings(word1, word2)
print(output)
```

↩ apbqrs

```
def interleave_strings(word1, word2):
    result = ""
    for a, b in zip(word1, word2):
        result += a + b
    return result
```

```
word1 = "abcd"
word2 = "pq"
output = interleave_strings(word1, word2)
print(output)
```

↩ apbqcd

import math

```
def find_common_substring(str1, str2):
    if str1[:len(str2)] == str2:
        return str2
    return ""
```

```
str1 = "ABCABC"
str2 = "ABC"
output = find_common_substring(str1, str2)
print(output)
```

↩ ABC

import math

```
def gcd_of_strings(str1, str2):
    def gcd(a, b):
        while b:
            a, b = b, a % b
        return a

    gcd_length = gcd(len(str1), len(str2))
    return str1[:gcd_length]
```

```
str1 = "ABABAB"
str2 = "ABAB"
output = gcd_of_strings(str1, str2)
print(output)
```

↩ AB

```
def common_prefix(str1, str2):
    min_length = min(len(str1), len(str2))
    result = ""
    for i in range(min_length):
        if str1[i] == str2[i]:
            result += str1[i]
        else:
            break
    return result
```

```
str1 = "LEET"  
str2 = "CODE"  
output = common_prefix(str1, str2)  
print(output)
```

