

```
def merge_strings(word1, word2):
    merged = ''.join(a + b for a, b in zip(word1, word2))
    return merged + word1[len(word2):] + word2[len(word1):]
```

```
word1 = "abc"
word2 = "pqr"
result = merge_strings(word1, word2)
print("Merged String:",result)
```

↩ Merged String: apbqcr

```
def merge_strings(word1, word2):
    merged = ''.join(a + b for a, b in zip(word1, word2))
    return merged + word1[len(word2):] + word2[len(word1):]
```

```
word1 = "ab"
word2 = "pqrs"

result = merge_strings(word1, word2)
print(result)
```

↩ apbqrs

```
def merge_strings(word1, word2):
    merged = ''.join(a + b for a, b in zip(word1, word2)) + word1[len(word2):] + word2[len(word1):]
    return merged
```

```
word1 = "abcd"
word2 = "pq"
result = merge_strings(word1, word2)
print(result)
```

↩ apbqcd

```
import math
```

```
def gcd_of_strings(str1, str2):
    if str1 + str2 != str2 + str1:
        return ""
    gcd_length = math.gcd(len(str1), len(str2))
    return str1[:gcd_length]
str1 = "ABCABC"
str2 = "ABC"
```

```
print(gcd_of_strings(str1, str2))
```

↩ ABC

```
import math
```

```
def gcd_of_strings(str1, str2):
    if str1 + str2 != str2 + str1:
        return ""
    gcd_length = math.gcd(len(str1), len(str2))
    return str1[:gcd_length]
str1 = "ABABAB"
str2 = "ABAB"
```

```
print(gcd_of_strings(str1, str2))
```

↩ AB

```
import math
```

```
def gcd_of_strings(str1, str2):
    if str1 + str2 != str2 + str1:
        return ""
    gcd_length = math.gcd(len(str1), len(str2))
    return str1[:gcd_length]
str1 = "LEET"
str2 = "CODE"
```

```
print(gcd_of_strings(str1, str2))
```

