def merge\_alternate(word1, word2):

return "".join(a + b for a, b in zip(word1, word2)) + word1[len(word2):] + word2[len(word1):]

word1, word2 = "abc", "pqr"

print("Output:", merge\_alternate(word1, word2))

Output: apbqcr

def merge\_alternate(word1, word2):

return "".join(a + b for a, b in zip(word1, word2)) + word1[len(word2):] + word2[len(word1):]

word1, word2 = "ab", "pqrs"

print("Output:", merge\_alternate(word1, word2))

Output: apbqrs

def merge\_alternate(word1, word2):

return "".join(a + b for a, b in zip(word1, word2)) + word1[len(word2):] + word2[len(word1):]

word1, word2 = "abcd", "pq"

print("Output:", merge\_alternate(word1, word2))

Output: apbqcd

def strings(str1, str2):

while str2:

str1, str2 = str2, str1[:len(str1) % len(str2)]

return str1

output = strings("ABCABC","ABC")

print("Output:",output)

Output: ABC

def strings(str1, str2):

while str2:

str1, str2 = str2, str1[:len(str1) % len(str2)]

return str1

output = strings("ABABAB","ABAB")

print("Output:",output)

Output: AB

def strings(str1, str2):

from math import gcd

return str1[:gcd(len(str1), len(str2))] if str1 + str2 == str2 + str1 else ""

output = strings("LEET","CODE")

print("Output:",output)

Output: