Repeating Strings

DiPS CodeJam 23-

Prompt

Given a string, determine if the string has two or more consecutive substrings that are equivalent. For example, given the strings s_1 [bdefdefg] and s_2 [abcab], s_1 will return true as the substring "def" repeats, while s_2 returns false.

Input Format

The first and only line of input contains string s.

Output Format

Print "true" if the string has two or more consecutive substrings that are equivalent, and print "false" otherwise.

Sample Input/Output

Input	Output
bdefdefg	true

Solution

- Find all substrings of the string.
- For each substring:
 - Check if double the substring ("abc" > "abcabc") is also present in the list of substrings.
 - If such a string is present, print "true" and exit the loop.
- If the loop has run through and no repeating substrings have been found, print "false."

Sample Program

```
s=input().strip()
substrings = [s[i:j] for i in range(len(s)) for j in range(i + 1, len(s) + 1)]
for substring in substrings:
   possibleRepeat=substring*2
   if possibleRepeat in substrings:
        print("true")
        break
else:
   print("false")
```