Given a string s, check if it can be constructed by taking a substring of it and appending multiple copies of the substring together.

**Example 1:**

Input: s = "abab"  
Output: true  
Explanation: It is the substring "ab" twice.

**Example 2:**

Input: s = "aba"  
Output: false

**Example 3:**

Input: s = "abcabcabcabc"  
Output: true  
Explanation: It is the substring "abc" four times or the substring "abcabc" twice.

**Constraints:**

* 1 <= s.length <= 104
* s consists of lowercase English letters.