We are given two strings, A and B.

A *shift on A* consists of taking string A and moving the leftmost character to the rightmost position. For example, if A = 'abcde', then it will be 'bcdea' after one shift on A. Return True if and only if A can become B after some number of shifts on A.

**Example 1:**

**Input:** A = 'abcde', B = 'cdeab'

**Output:** true

**Example 2:**

**Input:** A = 'abcde', B = 'abced'

**Output:** false

**Note:**

* A and B will have length at most 100.