Secret Code of the Cryptic Circle

HackerRank

In the secret society known as the **Cryptic Circle**, members communicate through a special code where they send messages by encoding words based on their lengths. Each encoded message is formed by replacing any number of **non-adjacent**, **non-empty** substrings with their lengths. However these lengths should **not** have leading zeros.

For example, the word "encipher" can be encoded as (but not limited to):

- "e6r" ("e**ncipher**")
- "en2p3" ("en**ci**p**her**")
- "8" ("**encipher**")
- "encipher" (no substrings replaced)

The following are not valid encodes:

- "e22her" ("e**nc ip**her", the replaced substrings are adjacent)
- "e06r" (has leading zeros)
- "en0cipher" (replaces an empty substring)

You are given the length of the original message, the original message itself, the length of the encoded message, and the encoded message. Determine if the encoded message matches the rules of the Cryptic Circle's encoding system. Print `TRUE` if the encoded message matches the rules, and `FALSE` otherwise.

Input Format

The first line will contain an integer M, the length of the original message. The second line will contain a string S, the original message. The third line will contain an integer L, the length of the encoded message. The fourth line will contain a string E, the encoded message.

Constraints

- $1 \leq M, L \leq 20$
- S consists of only lowercase English letters.
- E consists of lowercase English letters and digits.

Output Format

- Print `TRUE` if the encoded message matches the rules, and `FALSE` otherwise.

Sample Input 0

```
8
encipher
```

```
3
e6r
```

Sample Output 0

```
TRUE
```

Sample Input 1

```
8
encipher
6
e22her
```

Sample Output 1

```
FALSE
```