Prompt   Scratchpad   Our Solution(s)   Video Explanation   Run Code

Solution 1   Solution 2

```go
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package main

// O(2^(n + m)) time | O(n + m) space - where n is the length
// of the first string and m is the length of the second string
func InterweavingStrings(one, two, three string) bool {
	if len(three) != len(one)+len(two) {
		return false
	}
	return areInterwoven(one, two, three, 0, 0)
}

func areInterwoven(one, two, three string, i, j int) bool {
	k := i + j
	if k == len(three) {
		return true
	}

	if i < len(one) && one[i] == three[k] {
		if areInterwoven(one, two, three, i+1, j) {
			return true
		}
	}

	if j < len(two) && two[j] == three[k] {
		return areInterwoven(one, two, three, i, j+1)
	}
	return false
}
```