

4 / 4 points

1. Consider two strings:

**s1 = "ATTCCGGAC" and s2 = "TTACGG"**

We wish to find the longest common substring between these two strings.

- ☐ The longest common substring is of length 4: **"TTGG"**
- ☐ The longest common substring is of length 5: **"ATCGG"**
- ☒ The longest common substring is of length 5: **"TTCGG"**

✓ **Correct**

Correct. The only longer possibility is **"TTACG"** which is not a substring of s1

- ☒ Suppose we have committed to matching the second character **"T"** in s1 to the first character s2, the remaining decision is to optimally find the LCS for the suffix: **TCCGGAC** and **TACGG**

✓ **Correct**

Correct

☒ ??1 = 0

☒ Correct

☒ ??2 = 1

☒ Correct

☐ ??3 = max(0, 0) = 0

☒ ??3 = 1

☒ Correct  
Correct

☒ ??4 = max(??3, ??2)

☒ Correct  
Correct

☐ ??4 = ??1 + 1

☐ ??6 = ??3 + 1

☒ ??7 = ??4 + 1

☒ Correct  
Correct: the characters corr. to the cell labeled ??7 are the same.

☒ ??7 = 2

☒ Correct