**Question 3: PhraseEditor**

| Total Scored out of 9 |  |
| --- | --- |

**Part (a) replaceNthOccurrence 5 points**

Intent: Replace the nth occurrence of a given string with a given replacement

+1 Calls findNthOccurrence to find the index of the nth occurrence

+1 Preserves currentPhrase only if nth occurrence does not exist

+1 Identifies components of currentPhrase to retain (uses substring to extract before/after)

+1 Creates replacement string using identified components and repl

+1 Assigns replacement string to instance variable (currentPhrase)

**Part (b) findLastOccurrence 4 points**

Intent: Return the index of the last occurrence of a given string

+1 Calls findNthOccurrence to find the index of the nth occurrence

+1 Increments (or decrements) the value used as n when finding nth occurrence

+1 Returns the index of the last occurrence, if it exists

+1 Returns -1 only when no occurrences exist

**Question-Specific Penalties**

-1 (q) Uses currentPhrase.findNthOccurrence

-2 (r) Confused identifier instead of currentPhrase