**2021 Question 1: (9 points)**

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

**Part A:** ScoreGuess **(5 points)**

+1 Compares guess to a substring of secret

Responses can still earn the point even if they only call secret.indexOf(guess)

Responses will not earn the point if they use == instead of equals

+1 Uses a substring of secret with correct length for comparison with guess

Responses can still earn the point even if they

• only call secret.indexOf(guess)

• use == instead of equals

+1 Loops through all necessary substrings of secret (no bounds errors)

Responses will not earn the point if they skip overlapping occurrences

+1 Counts number of identified occurrences of guess within secret

(in the context of a condition involving both secret and guess)

Responses can still earn the point even if they

• initialize count incorrectly or not at all

• identify occurrences incorrectly

+1 Calculates and returns correct final score (algorithm)

Responses will not earn the point if they

• initialize count incorrectly or not at all

• fail to use a loop

• fail to compare guess to multiple substrings of secret

• count the same matching substring more than once

• use a changed or incorrect guess length when computing the score

**Part B:** findBetterGuess **(4 points)**

+1 Calls scoreGuess to get scores for guess1 and guess2

Responses will not earn the point if they

• fail to include parameters in the method calls

• call the method on an object or class other than this

+1 Compares the scores

Responses will not earn the point if they

• only compare using == or !=

• fail to use the result of the comparison in a conditional statement

+1 Determines which of guess1 and guess2 is alphabetically greater

Responses can still earn the point even if they reverse the comparison

Responses will not earn the point if they

• reimplement compareTo incorrectly

• use result of compareTo as if boolean

+1 Returns the identified guess1 or guess2 (algorithm)

Responses can still earn the point even if they

• call scoreGuess incorrectly

• compare strings incorrectly

Responses will not earn the point if they

• reverse a comparison

• omit either comparison

• fail to return a guess in some case