

AP Computer Science Principles
Create Performance Task
Scoring Commentaries on 2021 Rubrics
(Applied to Pilot Student Responses)

Sample B (Typing Game)

5/6 Points

Row 1: 1 pt

The response earned the point for this row, meeting all six criteria:

- The video demonstrates the program functionality of the user playing the typing game by inputting phrases and earning points. The output shows whether there is an error on what was entered. This satisfies the first three criteria for the video.
- The response describes the program’s purpose as “a computer game that allows people to practice their typing.”
- The response describes the video demonstration of functionality as, “Upon pressing start, on the first sentence, I incorrectly input the sentence and press done, which outputs a penalty on the timer and notifies the user. After I correctly type it and press done, the output is that the timer restarts and the score updates.”
- The response describes the input and output in the description of the program functionality. The input is “the sentence,” and the output is “a penalty on the timer and notifies the user.”

Row 2: 1 pt

The response earned the point for this row, meeting all three criteria:

- Two program code segments are provided in the written response, showing the initialization of a named list, `highScoreList`, and the use of `highScoreList` to maintain top-scoring players of the typing game.
- The response identifies the name of the list as `highScoreList`.
- The response describes the data contained in `highScoreList` by stating that the list “represents saved data from previous players of the game.”

Row 3: 1 pt

The response earned the point for this row, meeting both criteria:

- The response includes a program code segment where `highScoreList` is used to manage complexity.
- The response explains why `highScoreList` is necessary to manage complexity, because it “allows the high scores to be sorted more easily and then resaved to the file in a new sorted order. The saved data is processed for displaying the high scores and without this list, there would not be a way to insert a new high score into the file since we don’t know how many separate variables we would need.”

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Row 4: 1 pt

The response earned the point for this row. Because the response contains two code segments, the response must be scored based on only the first code segment—the `hasSpaceInString` procedure. The response met both criteria:

- The response provides a program code segment of a student-developed procedure, `hasSpaceInString`, which uses a parameter, `str`. The response provides a code segment showing a call to `hasSpaceInString` within program code related to the saving of a player's name.
- The response describes what `hasSpaceInString` does: it “finds if there is a space in their name using iteration.” The response describes how this contributes to the program, saying it is part of “managing the user's input for their score name which includes how long their username is and if there are spaces involved.”

Row 5: 0 pts

The response did not earn the point for this row. Because the response contains two code segments, the response must be scored based on only the first code segment—the `hasSpaceInString` procedure. The response met only one of the two criteria:

- The response student-developed algorithm in the `hasSpaceInString` procedure includes sequencing, selection (if statement), and iteration (for loop).
- The response provides a description of the functionality of the second code segment, which has been provided to demonstrate a call to the first code segment (procedure `hasSpaceInString`), rather than a description of the algorithm in the procedure `hasSpaceInString`. The response begins to explain how `hasSpaceInString` works by saying “using iteration”; however, this is not enough detail for the algorithm to be recreated by another programmer.

Row 6: 1 pt

The response earned the point for this row, meeting all three criteria:

- The response describes two calls to the `hasSpaceInString` procedure, each passing different arguments: “Mr Guy” and “Mr.Clean.”
- The response describes the conditions being tested as whether the string “has a space in it” and whether the string “doesn't have a space in it.”
- The response describes the result of each call as true or false.