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

Sample H (Water Safety) 2/6 Points

Row 1: 1 pt

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

- The video demonstrates the running of the program, including user input of values and processing of responses, which yield output statements. This satisfies the first three criteria for the video.
- The written response provides the program's purpose is "to help people identify if their water is safe for drinking or for animals."
- The written response describes the program's functionality as identifying "if their water is safe for drinking or for animals."
- The response describes the input as "the user input when prompted with questions" and the output as "the program telling if the water is safe for drinking or for animals to live in."

Row 2: 0 pts

The response did not earn the point for this row. The response met two of the three criteria:

- The response includes program code segments showing how data have been stored in a named list, values. Additionally, a program code segment is provided showing how values is used to process responses based on user data.
- The response identifies the list as values.
- The response does not describe what is being stored in the list values.

Row 3: 0 pts

The response did not earn the point for this row. The response does not meet either of the two criteria:

- The response includes a program code segment showing a list, values, being used; however, the
 list does not manage complexity in the program, as it holds only one element, which could be stored
 in a single variable.
- The response rationale provides that, "Instead of having to write every variable, I can just write the
 index of the list." However, this does not result in a program that is easier to develop, maintain, or
 scale based on the use of the list.

Row 4: 0 pts

The response did not earn the point for this row. The response met only one of the two criteria:

- The response includes a program code segment of a student-developed algorithm; however, it does not include a procedure with a parameter.
- The response describes what the program code segment does by saying that it "takes in the user input and adds it to the list," and that it "tests to see if the nitrate levels are in the correct range for the fish or to drink."

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Row 5: 1 pt

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

- The response includes a student-developed algorithm that includes sequencing, selection (the try...except), and iteration (the while loop).
- The response explains how the algorithm works in detail. It states that the "algorithm accomplishes the task of adding user input into a list...if the user enters something other than an integer, it will ask the user to try again.

Row 6: 0 pts

The response did not earn the point for this row. The response does not describe two calls to the selected procedure, as there was not a procedure provided in the response. The response describes user inputs, but these are not shown as parameters to a procedure. The response does not meet any of the criteria.