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

Sample I (Random Numbers)
2/6 Points

Row 1: 0 pts

The response did not earn the point for this row. The response met only five out of the six criteria:

- The video demonstrates the programming running, including input (entering an integer), functionality (producing a series of values), and output (displaying the series of values). This satisfies the first three criteria for the video.
- The response states that the program's purpose is to "address the issue of having to create random numbers for various purposes."
- The response describes the functionality shown in the video as, "The video shows the program being used to create random integers based on an integer input."
- The response describes the input shown in the video as "based on an integer input"; however, there is no description in the response of the output demonstrated in the video. Calculating random numbers is not the same as displaying these numbers as output from the program.

Row 2: 1 pt

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

- The response includes a program code segment showing how data have been stored in a list, `list`, as well as how that list is generated in the procedure.
- The response identifies the list as `list`.
- The response provides that the "data contained represents random integers."

Row 3: 0 pts

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

- The response includes a program code segment that shows a list being used; however, this list does not manage complexity in the program, as it is irrelevant. The random values could easily be printed as they are generated.
- The response attempts to explain how the list would manage complexity by stating that it "makes generating multiple numbers easier because without lists each number would be printed individually." However, the random values could easily be printed as they are generated, so the list does not manage complexity in the program.

Row 4: 1 pt

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

- The response includes a program code segment of a student-developed procedure, `genlist`, which takes in a parameter, `n`. It also includes a program code segment showing where `genlist` is called.
- The response describes what `genlist` does and how it contributes to the overall functionality of the program: "This procedure consolidates the generation of random numbers into a simple function. This accomplishes its task by generating numbers and returning a list."

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Row 5: 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 that includes sequencing, selection (`if n < 2:`), and iteration (for loop).
- The response describes what the algorithm does; however, it does not explain how the algorithm works so it can be recreated.

Row 6: 0 pts

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

- The response describes two calls to the selected procedure, `genlist`, with two different parameters (5 and 10).
- Both of the procedure calls supply valid input; however, since they are both greater than 1, the calls do not evoke different segments of code in the algorithm to execute.
- The response identifies the results of the calls: the "result is a list with a.) 5 random ints b.) 10 random ints."