



AP[®] Computer Science A 2002 Scoring Commentary

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Question 1

Sample A (Score 9)

This student had a completely correct solution. Part (b) decrements the parameter `k` instead of counting up to `k`.

Sample B (Score 9)

This student had an unusual solution in part (b) that counts through `tally` for a given value (`i`) with an inner loop.

Sample C (Score 6)

This student did well on part (a), losing 1 point because `tally[k]` is the assigned value instead of `k`. On part (b), this student shows no understanding of the concept of the `k`th data value as an index of the `apvector`, but gets some points for the loop and conditional structures.

Question 2

Sample A (Score 9)

This student had a completely correct solution. It uses an awkward, but correct, initialization and update of the lowest initial price.

Sample B (Score 6)

This student had a correct solution for part (a). In part (b), the student failed to call `GetItems` correctly, did not test for the special case, and did not initialize the best bargain appropriately.

Sample C (Score 6)

This student loses 1 point in part (a) for failing to use the proper call to a member function when setting the price. In part (b), the student loses 2 points for failing to calculate the unit price and for making an improper call to `GetItems`.

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Question 3

Sample A (Score 9)

This student had a completely correct solution. The approach to the solution in part (c) is an excellent use of the abstraction provided by the member function.

Sample B (Score 9)

This student had a completely correct solution. Each case had a return at the end in part (b) and part (c) included the correct use of private variables and function calls.

Sample C (Score 6)

This student loses a point in part (a) for creating the wrong position and loses correctness points in part (c) for incorrect logic. Using `pos` instead of `myPos` in part (b) loses a half point for usage.

Question 4

Sample A (Score 9)

This student had a nearly correct solution. In part (a), a half point was lost for comparing the wrong expression against `"any"`.

Sample B (Score 9)

This solution is completely correct.

Sample C (Score 6)

In part (a), this student lost a half point for failing to use the `GetPassenger()` function. The student received two half points in part (b) for the matrix traversal attempt and the attempt to find a block of seats. In part (c), the loop to assign the passengers to seats has the wrong ending condition (it should be; `BlockStart + SeatsNeeded`) and loses the half point for correctness.