

AP® COMPUTER SCIENCE A GENERAL SCORING GUIDELINES

Apply the question assessment rubric first, which always takes precedence. Penalty points can only be deducted in a part of the question that has earned credit via the question rubric. No part of a question (a, b , c) may have a negative point total. A given penalty can be assessed only once for a question, even if it occurs multiple times, or in multiple parts of that question. A maximum of 3 penalty points may be assessed per question.

1-Point Penalty

- (w) Extraneous code that causes side effect (e.g., printing to output, incorrect precondition check)
- (x) Local variables used but none declared
- (y) Destruction of persistent data (e.g., changing value referenced by parameter)

Mr Lee’s 1-Point Penalty:

- Inefficient, “long winded” or “messy” difficult to understand code which takes longer to write than standard more efficient solutions.
 - In an exam you need to save time by writing quickly hand writable efficient code which is easy for AP readers to understand.

No Penalty

- Extraneous code with no side effect (e.g., precondition check, no-op)
- Spelling/case discrepancies where there is no ambiguity*
- Local variable not declared provided other variables are declared in some part
- Keyword used as an identifier
- Common mathematical symbols used for operators ($x \bullet \div \leq \geq < > \neq$)
- = instead of == and vice versa
- Missing { } where indentation clearly conveys intent
- Missing () around *if* conditions

** Spelling and case discrepancies for identifiers fall under the "No Penalty" category only if the correction can be unambiguously inferred from context; for example, "total" instead of "totl". As a counterexample, that if the code declares "int G=99 , g=0; ", then uses "while (G < 10) " instead of "while (g < 10) ", the context does not allow for the reader to assume the use of the lower-case variable.*

if – TheatreTickets FRQ

A theater has different ticket types. All tickets have a class and a price.

Class	Description	Sample Output
Walkup	These tickets are purchased on the day of the event and cost 50 dollars.	<i>50.0</i>
Advance	Tickets purchased ten or more days in advance cost 30 dollars. Tickets purchased fewer than ten days in advance cost 40 dollars.	<i>40.0</i>
StudentAdvance	These tickets are a type of Advance ticket that costs half of what that Advance ticket would normally cost.	<i>15.0</i> <i>(student ID required)</i>

(a) Write a code segment that calculates and prints the price of an Advance ticket using a variable (*which your code segment should declare*) that indicates the number of days in advance that a ticket is being purchased. Tickets purchased ten or more days in advance cost \$30; tickets purchased nine or fewer days in advance cost \$40.

(b) Write a second code segment that calculates and prints the price of a StudentAdvance ticket. If the pricing scheme for Advance tickets changes, the StudentAdvance ticket price should continue to be computed correctly with no code modifications to the calculation of the StudentAdvance ticket price.