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 • ÷ ≤ ≥< > ≠)
- = instead of == and vice versa
- Missing `{ }` where indentation clearly conveys intent
- Missing `()` around `if` or loop 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=O; ", 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.*

06 Loops – CodeNumber FRQ

Write a code segment that checks if a code number is valid.

The code segment should use four `int` variables which specify the code number to check ***(precondition: >= 0 && <= 2147483647)***, minimum code number length ***(precondition: >= 1 && <= 10)***, maximum code number length ***(precondition: >= minimum code number length && <= 10)*** and a digit that must not occur in the code number ***(precondition: >= 0 && <= 9)***.

The following examples illustrate the expected behavior.

Example 1
5, *8*, *2*
Valid code words have *5* to *8* digits and must not include the digit *2*.

Code Number	Prints *(boolean)*	Explanation
13456	true	The code number is valid.
123456	false	The code number contains the digit *2*.
1345	false	The code number is too short.
134567891	false	The code number is too long.

Example 2
3, *6*, *9*
Valid code words have *3* to *6* digits and must not include the digit *9*.

Code Number	Prints *(boolean)*	Explanation
1234	true	The code number is valid.
12349	false	The code number contains the digit *9*.
12	false	The code number is too short.
1234567	false	The code number is too long.

Complete the code segment below.