

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 (\times • \div \leq \geq $<$ $>$ \neq)
- = instead of == and vice versa
- Missing {} where indentation clearly conveys intent
- Missing () around *if* or *while* 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.*

Strings – Checker FRQ

A *Checker* is a program that examines strings and accepts those strings that meet a particular criterion.

A *SubstringChecker* code segment in the checker program accepts any string that contains a particular substring. For example, suppose the *SubstringChecker* code segment is coded to accept all strings containing the substring *"broccoli"*.

The following table illustrates the results of several runs of the *SubstringChecker* code segment.

<i>String</i>	Result
<i>"broccoli"</i>	<i>true</i>
<i>"I like broccoli"</i>	<i>true</i>
<i>"carrots are great"</i>	<i>false</i>
<i>"Broccoli Bonanza"</i>	<i>false</i>

Write the *SubstringChecker* code segment. The code segment should correctly declare and initialise 2 *String* variables that represent the particular substring to be matched and the *String* to check for acceptance.