

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.*

SHOW ALL YOUR WORK. REMEMBER THAT PROGRAM SEGMENTS ARE TO BE WRITTEN IN JAVA.

Assume that the following variables have been properly declared and initialized.

- a *boolean* variable named *rsvp*
- an *int* variable named *selection*, where 1 represents "beef", 2 represents "chicken", 3 represents "pasta", and all other values represent "fish"
- a *String* variable named *option2*

(a) Write a code segment that will store a dinner selection in a *String* variable named *option1* based on the values of *rsvp* and *selection*. The intended behavior of the code segment is described below.

If *rsvp* is *true*, the code segment should store in *option1* a *String* indicating the person's attendance and food choice. For example, if *rsvp* is *true* and *selection* is 1, the following *String* should be stored in *option1*.

"Thanks for attending. You will be served beef."

If *rsvp* is *false*, the following *String* should be stored in *option1*, regardless of the value of *selection*.

"Sorry you can't make it."

Write the code segment below. Your code segment should meet all specifications and conform to the examples.

(b) Write a code segment that will print *true* if the strings *option1* and *option2* contain the same values and will print *false* otherwise.