Question 1 of 10

Given the following code in C++,

int x[10];

x[10] = 10;

C++ lets you write to an element outside the array. Based on this design, which criteria of C++ is negative?

A. Readability

B. Reliability

C. Writability

D. Cost

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Question 2 of 10 1.0 Points

In Algol, there is no reserved word, so there may be a valid if statement like: if if = then then .... Based on this design, which criteria is negative?

A. Cost

B. Readability

C. Reliability

D. Writability

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Question 3 of 10 1.0 Points

Although being statically type checking, Java performs dynamic type checking. For example, Java is able to prevent an access to an element outside an array such as

int x[10],y;

y = 12;

x[y] = 12;

which criteria is negative by this design?

A. Cost

B. Writability

C. Reliability

D. Readability

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Question 4 of 10 1.0 Points

Given the following code that contains a syntax error at the second line:

cout << 120;

x = y + ; // syntax error

If the value 120 is printed out before the error message is provided, which translator is used?

A. Hybrid Compiler and Interpreter

B. Just-In-Time Compiler

C. Pure Interpreter

D. Compiler

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Question 5 of 10 1.0 Points

In the beginning, a program will be executed by an interpreter but after a certain time, a method in the program which is executed many times will be translated by \_\_\_\_\_\_\_\_\_\_\_\_\_ into machine code.

A. Just-In-Time compiler

B. Compiler

C. Hybrid Implementation

D. Pure Interpreter

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Question 6 of 10 1.0 Points

Assume that:

- a program that contains n lines of code

- it takes t1 seconds to translate each line of code

- it takes t2 seconds to execute machine code of each line of code

- the program is translated and executed only one time

- no cost to switch between translation and execution

which interpreter or compiler will make the program run faster?

A. Interpreter

B. Compiler and Interpreter make the program run equally

C. Compiler

D. Cannot determine which will make the program run faster

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Question 7 of 10 1.0 Points

Given the following C++ code that contains the error in the first line:

int wrong@id;

which phase of compilation process will issue the error message?

A. Syntax analyzer

B. Lexical analyzer

C. Semantic analyzer

D. Intermediate code generator

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Question 8 of 10 1.0 Points

Given the following C++ code that contains a type mismatch error at line 2:

int x;

x = 10.2;

which compilation phase will issue the type mismatch error message?

A. Lexical analyzer

B. Syntax analyzer

C. Semantic analyzer

D. Intermediate code generator

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Question 9 of 10 1.0 Points

Which program performs file inclusion?

A. Loader

B. Preprocessor

C. Assembler

D. Linker

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Question 10 of 10 1.0 Points

A program can be made of many source files but there is only one execution file of the program. Which of the following combines many object files into one execution file?

A. Assembler

B. Loader

C. Linker

D. Preprocessor