Trishal Varma

Homework 3

Due: Apr. 19th 2020

1. If any two expressions in the program that have the same value can be substituted for one another anywhere in the program, without affecting the action of the program, this property is called ___? (1 point)

   a. Referential transparency
   b. Subtype
   c. Mutually exclusive
   d. None of above

2. When a function changes either one of its parameters or a global variable, it will cause __? (1 point)

   a. Overwriting
   b. Side effect
   c. Overloading
   d. Overriding

3. If a for-statement in a C program missed the second expression, what would happen ? (1 point)

   a. No assumptions are made
   b. Randomly terminated
   c. Infinite loop
   d. Immediately terminated

4. What are the two fundamental kinds of subprograms __? (choose all that apply) (1 point)

   a. Selections
   b. Functions
   c. Procedures
   d. Loops

5. Since C++ doesn't support keyword parameters, the default parameters must appear __? (1 point)

   a. Last

b. First
c. Middle
d. Nowhere

6. What is the difference between functions and procedures (strictly speaking)? (1 point)

   a. Whether return values
   b. Whether have parameters
   c. Whether need prototypes
   d. None of above

7. For scalars, pass-by-value is __? (1 point)

   a. Fast
   b. Slow
   c. Depends
   d. Not allowed

8. Which language(s) using pass-by-assignment? (choose all that apply) (1 point)
   a. Python
   b. C
   c. Java
   d. Ruby

9. What are the two fundamental kinds of abstraction in contemporary programming languages? (choose all that apply) (1 point)

   a. Function abstraction
   b. Process abstraction
   c. Data abstraction
   d. None of above

10. In which language, a class can be stand-alone, without a superclass? (1 point)
   a. C++
   b. Java
   c. Smalltalk
   d. Ruby