Quiz #10

Due Apr 20 at 3:30pm   **Points** 20   **Questions** 14

Available Apr 19 at 11:59am - Apr 20 at 3:30pm 1 day   **Time Limit** None
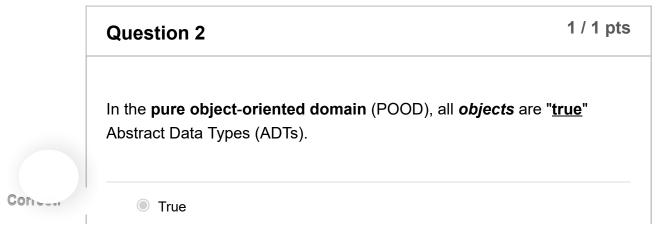
This quiz was locked Apr 20 at 3:30pm.

Attempt History

	Attempt	Time	Score
LATEST	[Attempt 1](#)	53 minutes	10 out of 20

Score for this quiz: **10** out of 20

Submitted Apr 20 at 11:10am

This attempt took 53 minutes.

Question 1	1 / 1 pts

In Smalltalk, the equivalency of *data* and *code* still holds as in Lisp.

Correct!

- ⦿ True

- ○ False

Question 2	1 / 1 pts

In the **pure object-oriented domain** (POOD), all *objects* are "**true**" Abstract Data Types (ADTs).

Correct!

- ⦿ True

○ False

Question 3　　　　　　　　　　1 / 1 pts

In POOD an **_abstract_ class** does not have a **behavior**, it is mainly to spawn subclasses.

○ True

Correct!　　　　● False

Question 4　　　　　　　　　　1 / 1 pts

Although, there is no **explicit** "typing" system, i.e., type declaration and type checking, the POOD languages still maintain a **_secure_** typing system!

Correct!　　　　● True

○ False

Question 5　　　　　　　　　　1 / 1 pts

A **class**'s instance **can** still **change** the **_state_** of its **_instantiating_ class**, and all of its **_super-classes_** ancestors.

Correct!

○ True

○ False

Question 6　　　　　　　　　　　　　　　　0 / 1 pts

Although, the *multiple_inheritance* feature in POOD is a **violation of classes' abstraction**, yet still **secure**.

ou Answered

⦿ True

orrect Answer

○ False

Question 7　　　　　　　　　　　　　　　　1 / 1 pts

Upon receiving a message, an object might change its **own state**, and possibly **other objects' states**.

Correct!

⦿ True

○ False

Question 8　　　　　　　　　　　　　　　　1 / 1 pts

Any class in the POOD is an ***object*** that has a "**state**" and "**behavior**" that might be part of its definition, or inherited from its super-classes' ancestors in the **inheritance tree** hierarchy, up to the root class "**object**".

Correct!

- ◉ True

- ○ False

Question 9   1 / 1 pts

Yes, a POOD has ***polymorphic power***.

Correct!

- ◉ True

- ○ False

Question 10   0 / 1 pts

Smalltak has **recursion**.

orrect Answer

- ○ True

ou Answered

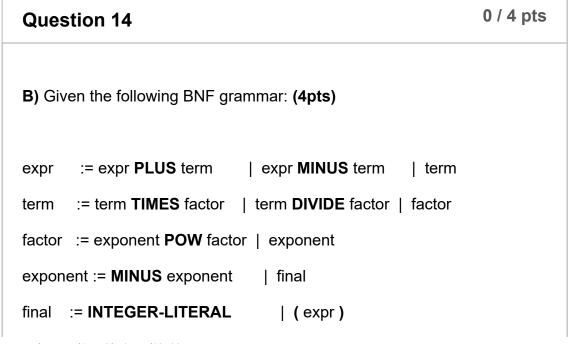- ◉ False

Question 11

2 / 2 pts

A) Giving the following Smalltalk statement:

sum := 0.   1 to: 50 by: 10 do:[:x| sum := sum +x]. ^sum.

a) what is the output of executing the above code?

   ○ 33

   ○ 45

   ○ 100

   ○ 300

Correct!   ◉ none of the above

Question 12

0 / 2 pts

Giving the same following Smalltalk statement as A:

sum := 0.   1 to: 50 by: 10 do:[:x| sum := sum +x]. ^sum.

b) What is the message used in the above code?

   ○ to

   ○ to:by do:

○ tobydo:

ou Answered

◉ do:by:to:

orrect Answer

○ none of the above

Question 13   0 / 2 pts

Giving the same following Smalltalk statement as A:

sum := 0.   1 to: 50 by: 10 do:[:x| sum := sum +x]. ^sum.

    c) Is the class recipient of the keyword message, in part b above, the Integer class?

orrect Answer

○ True

ou Answered

◉ False

Question 14   0 / 4 pts

B) Given the following BNF grammar: **(4pts)**

expr   := expr **PLUS** term | expr **MINUS** term | term

term   := term **TIMES** factor | term **DIVIDE** factor | factor

factor := exponent **POW** factor | exponent

exponent := **MINUS** exponent | final

final   := **INTEGER-LITERAL** | **(** expr **)**

PLUS := +   MINUS :=−   TIMES := *   DIVIDE := /   POW = **

INTEGER-LITERAL := 0 | 1 | 2 | 3 |……………| 8 | 9

What is the value of the following expression: –

4**8

○ 32,478

○ –50,428

ɔu Answered

⦿ 64,520

○ –65,536

ɔrrect Answer

○ 65,536

○ none of the above

Quiz Score: **10** out of 20