SI100B Python Programming Quiz 2 Solution

True or False

Question 01	Question 02	Question 03	Question 04	Question 05	Question 06
T	F	T	T	T	F

Question 07	Question 08	Question 09	Question 10	Question 11	Question 12
F	T	F	F	T	T

Question 13	Question 14	Question 15	Question 16	Question 17	Question 18
F	T	T	T	F	F

Explanation

2. A file handler is an ordered sequence.

6. `x = 2` is in the scope of the method `__init__`, which will not affect the class attribute.

13. Please check Slide 73, Lecture 6

17. Please check Slide 8, Lecture 7

Multiple choices

Question 19	Question 20	Question 21
A	B	B

Explanation

19. `1 +` on Line 2 will raise an error while the Python 3 interpreter performs a syntax check before execution. Actually, the program will not be executed due to `SyntaxError`.

21. Since the `except` clauses are checked in sequence, the first `except` branch will be executed.

Blank fillings

Question 22

1st call	2nd call	3rd call	4th call
0	2	2	3

Explanation

On Line 6, the `x` in `foo()` scope is changed due to `nonlocal x` statement on Line 5.

- `nonlocal x` corresponds the name `x` to refer to *previously bound variables in the nearest enclosing function scope (excluding global scope)*. (Quoted from Slide 43, Lecture 4)

The first call is in function `baz()`. The `x` to be printed is in global scope due to `global x` on Line 8.

After that, x in global scope will be 3 after execution of the statement $s = 3$ on Line 10.

The second call is the `print` statement on Line 12. It prints the x in the scope of `foo()` as explained before.

The third call is the `print` state on Line 14. It prints the x in its local scope, i.e. the scope of function `foo()`.

The last call is the `print` state on Line 17. It prints the x in the global scope.