Python for UBS

General information

1. How long have you been programming in Python?
   - 1 year or less
   - 2 years
   - 3 years
   - 4 years or longer

2. What operating system do you use?

3. What Python IDE do you use?

4. In what kind of application/scripts (or other usage) do you mostly use Python?

5. What libraries or tools do you mostly use when coding in Python?

6. What problems (regarding programming in Python) would you like to learn to solve?

7. What are your expectations from this training e.g. what scope should be covered during the training?

Knowledge test

There is only one correct answer in each question.
All questions relate to the newest Python version (Python 3.7)
Please, do not check the answers in your IDE or on the Internet:) The goal is to estimate your experience and prepare training agenda on this basis.

1. How to correctly write `"Hello world!"`?
   - `print("Hello world!")`
   - `print "Hello world!"`
   - `print(Hello world!)`
   - `print Hello world`
2. Which of the following commands will assign to a variable `result` string of characters `"Python"`?
   - `result = "Py" + "thon"`
   - `result = "Py" . "thon"`
   - `result = "Py" x "thon"`
   - `result = {"Py": "thon"}`
3. Which of the following instructions does not perform any operation?
   - `noop`
   - `wait`
   - `pass`
   - `sleep`
4. Which of the following keywords is used to define a conditional statement?
   - `check`
   - `when`
   - `switch`
   - `if`

5. How to correctly declare a function called `get_full_name`, having two arguments: `first_name` i `last_name`?
   - `function get_full_name(first_name, last_name):`
   - `def get_full_name: first_name, last_name →`
   - `def get_full_name(first_name, last_name):`
   - `def get_full_name = (first_name, last_name) =>`

6. What is the name of the first argument of the method (function in a class)?
   - `this`
   - `self`
   - `that`
   - `arg`

7. What is the result of the action: `1_2 + 3_4` ?
   - 4.6
   - -2
   - 46
   - This action will cause an error

8. Which of the following keywords is used to enable a context manager?
   - `with`
   - `using`
   - `go`
   - `run_manager`

9. Which of the following instructions is used to enable a csv module in our code?
   - `require('csv')`
   - `use csv`
   - `use('csv')`
   - `import csv`

10. Which of the following instructions will return the length of the string: `"abc"` (number of letters)?
    - `len("abc")`
    - `length("abc")`
    - `"abc".length()`
    - `"abc".get_length()`

11. The following code snippet: `some_variable = [number for number in range(10)]` is an example of usage of:
    - List comprehension
    - Dict comprehension
    - Generator expression
    - Tuple expression

12. Which of the following types is mutable?
    - `bool`
    - `str`
    - `list`
    - `int`

13. How to return the last element from the list: `grades = [5, 3, 2, 5]`?
    - `grades[last]`
    - `grades[-1]`
    - `grades[len(grades)]`
    - `grades[4]`

14. Which keyword is **NOT** the element of the block of exception handling (`try…`)
- `except`
- `finally`
- `catch`
- `else`

15. How to declare a class `FullTimeContract`, which inherits from the class `Contract`?
- `class FullTimeContract(Contract):`
- `class FullTimeContract inherits Contract:`
- `class FullTimeContract implements Contract:`
- `class FullTimeContract: Contract`

16. Declaration `def get_distance() → Optional[int]:` means that function `get_distance` should:
- Always return a value of type `int`
- Take the parameter `out` of type `int`
- be invoked with any number of parameters of type `int`
- Always return a value of typu `int` or value `None`

17. What type can NOT be a key in a dictionary?
- `int`
- `str`
- `bool`
- `list`

18. How to correctly use an empty list as a default argument for a function?
- `def calculate(numbers=[]):`
- `def calculate(numbers=None):`
    `if numbers is None:`
        `numbers = []`
- `def calculate():`
    `numbers = []`
- `def calculate(numbers: []):`

19. Which of the function: `def download(url, timeout=5):` invocation is **NOT** correct?
- `download("www.infoshareacademy.com")`
- `download(url="www.infoshareacademy.com", 10)`
- `download(timeout=10, url="www.infoshareacademy.com")`
- `download(url="www.infoshareacademy.com")`

20. How to return a list, having elements indexed 1, 2 and 3 from the list: `grades = [5, 3, 2, 5, 6]`?
- `grades[1:]`
- `grades[1][2][3]`
- `grades[1:2:3]`
- `grades[1:4]`