1. Question 1

Match the following examples to the expected result

Prompts

Submitted Answers

1. 14//4 — 3
2. 14%4 — 2
3. 14.0/4 — 3.5

2. Question 2

What sequence will this generate? range(5, 10)

1. ☐ **5, 6, 7, 8, 9**
2. ☐ **6, 7, 8, 9, 10**
3. ☐ **5, 6, 7, 8, 9, 10**
4. ☐ **6, 7, 8, 9**

3. Question 3

Which of these loops will run 10 times?

1. ☐

```
i = 0
while i < 9:
  # do something
  i += 1
```

2. ☐

```
i = 0
while i <= 10:
  # do something
i += 1
```

3. ☐

```
i = 0
while i < 10:
  # do something
  i += 1
```

4. ☐

```
i = 0
while i < 11:
  # do something
  i += 1
```

4. Question 4

fruit = {"Banana": "Yellow", "Apple": "Red", "Watermelon": "Green"}

Which code segment prints only the fruit colours stored in the fruit?

1. ☐

```
for item in fruit.items():
  print(item)
```

2. ☐

```
for item in fruit.values():
  print(item)
```

3. ☐

```
print(fruit)
```

4. ☐

for item in fruit.keys():
** print(item)**

5. Question 5

x = 4
y = 5

Which of the following is true?

1. ☐

not (x == 4)

2. ☐

not (x == 5)

3. ☐

not (y == 5)

4. ☐

x != 4

6. Question 6

Match the statement to the correct definition.

Prompts

Submitted Answers

1. What does the **break** statement do?

Terminates the loop execution

2. What does the **continue** statement do?

Skips the current iteration and goes to the next iteration of the loop

7. Question 7

Which of the following is a relational operator?

1. ☐

=

2. ☐

All are relational operators

3. ☐

=<

4. ☐

<=

8. Question 8

Which of the following expressions checks whether a value assigned to the **total** variable falls in the range 70 to 100?

1. ☐

total >= 100 and total <= 70

2. ☐

total >= 70 and <= 100

3. ☐

total >= 70 and total <= 100

4. ☐

total >= 70 or total <= 100

9. Question 9

registered = True

Given the above, which of the following if statements includes a condition that evaluates to true?

1. ☐

All answers are correct

2. ☐

if registered:

3. ☐

if registered = True:

4. ☐

if registered == "True":

10. Question 10

If a user-defined function does not return a value, what will it return by default?

1. ☐

None

2. ☐

0

3. ☐

An empty string

4. ☐

True or False

11. Question 11

```
month = [['Jan', 'Feb', 'March'],
['April', 'May', 'June'],
['July', 'August', 'Sept'],
['Oct', 'Nov', 'Dec']]
```

How would you use indexing to to access the value **Sept**?

month[2][2]

12. Question 12

How many times will the following run?

```
for i in range(1,4):
  for j in range(1,4):
    # do something
```

1. ☐

8

2. ☐

9

3. ☐

4

4. ☐

6

13. Question 13

Which of the following function headers is valid?

1. ☐

def sum(a = 2, b):

2. ☐

All are valid

3. ☐

All are invalid

4. ☐

def sum(a, b = 3, c = 5):

5. ☐

def sum(a = 2, b, c = 5):

14. Question 14

Which of the following will cause an error if x = 2, y = 12, and z = 0?

1. ☐

y + 12

2. ☐

x ** z

3. ☐

None will cause an error

4. ☐

y / z

5. ☐

y % 3

15. Question 15

Which list method insert a new item to the end of an existing list?

1. ☐

end()

2. ☐

pop()

3. ☐

append()

4. ☐

push()

16. Question 16

Which of the following is TRUE?

1. ☐

Lists are immutable

2. ☐

Dictionaries are immutable

3. ☐

All answers are true

4. ☐

Tuples are immutable

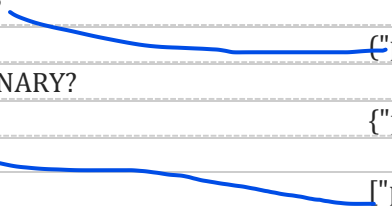
17. Question 17

Match the following definitions to the correct example.

Prompts

Submitted Answers

1. Defines a TUPLE?
2. Defines a DICTIONARY?
3. Defines a LIST?



{"plum", "banana", "cherry"}

{"plum", "banana", "cherry"}

["plum", "banana", "cherry"]

18. Question 18

What sequence will this generate? range(3, 10, 2)

1. ☐

10, 8, 6, 4

2. ☐

3, 5, 7, 9

3. ☐

3, 5, 7, 9, 3, 5, 7, 9

4. ☐

9, 7, 5, 3

19. Question 19

You want to write a condition statement with multiple alternatives to print out the category of a mark entered by a user. What is wrong with the following ?

```
if mark < 50:
  print('Pass')
if mark < 60:
  print('Merit')
if mark < 101:
  print('Distinction')
```

1. ☐

An else should always be included.

2. ☐

The conditions should use chained conditionals with elif.

3. ☐

The conditions are in the wrong order; the check for the highest bracket should be first.

4. ☐

The condition statements will correctly print out the appropriate category.

20. Question 20

Which of the following is NOT a valid augmented assignment operator?

1. ☐

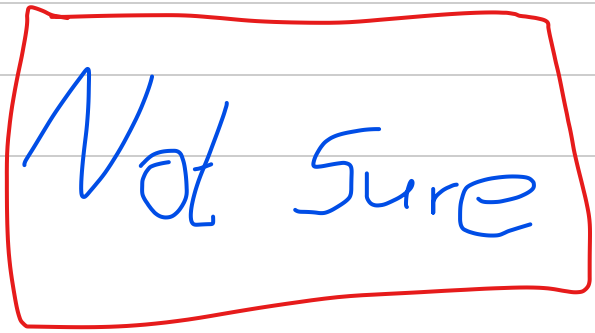
***=**

2. ☐

+=

3. ☐

x=



4. ☐

-=

21. Question 21

Which of the following elements of a mathematical expression in Python is evaluated first?

1. ☐

Addition +

2. ☐

Subtraction -

3. ☐

Multiplication *

4. ☐

Parenthesis ()

22. Question 22

A variable defined inside a function is referred to as a?

1. ☐

block variable

2. ☐

global variable

3. ☐

function variable

4. ☐

local variable

23. Question 23

s = “hello”

Which of these is correct for the given string?

1. ☐

upper(s) returns new string with all capital letters

2. ☐

upper(s) returns a new string with the first letter as a capital letter

3. ☐

s.upper() returns a new string with the first letter as a capital letter

4. ☐

s.upper() returns new string with all capital letters

24. Question 24

Which list method inserts a new item at a specified index of an existing list?

1. ☐

pop()

2. ☐

insert()

3. ☐

   append()

4. ☐

   add()

25. Question 25

    When was the following method of string formating introduced?

    print(f'This module is { module}')

1. ☐

   Python 3.6

2. ☐

   Python 2.6

3. ☐

   Python 3.0

4. ☐

   Python 2.0

26. Question 26

    Which of the following expressions checks whether a value in *age* is either less than 18 or more than 65?

1. ☐

   age < 18 and age > 65

2. ☐

   age <= 18 or age >= 65

Not sure

3. ☐

age < 18 or age > 65

4. ☐

age <= 18 and age >= 65

27. Question 27

Which errors can be handled using the try..except statement?

1. ☐

Semantic errors

2. ☐

All these errors can be handled using the try..except statement

3. ☐

Syntax errors

4. ☐

Runtime errors

28. Question 28

Consider a function named calc. It accepts two integer arguments and returns their sum as an integer.

Which of the following statements is a correct invocation of the calc function?

1. ☐

total = calc()

2. ☐

total = calc(2, 3)

3. ☐

total = (2, 3)

4. ☐

total = calc(2)

29. Question 29

Match the code to the expected result

Prompts

Submitted Answers

1. numbers = [1, 2, 3, 4, 5, 6, 7]
numbers.pop(4)

[1, 2, 3, 4, 6, 7]

2. numbers = [1, 2, 3, 4, 5, 6, 7]
numbers.pop()

[1, 2, 3, 4, 5, 6, 7]

30. Question 30

How would you access the substring 'duct'?
s = 'Introduction'

~~**s[5:8]**~~ s[5:9]

31. Question 31

Which of the following is **NOT** a valid operation on a Python string variable?

1. ☐

Changing a string. E.g., name[2] = 'u'

2. ☐

Addition of strings. E.g., 'Hello' + ' World!'

3. ☐

Indexing a string to get a single letter of the string. E.g.,
name = 'Maxim'
name[0]

4. ☐

Multiplication of string and integers. E.g., 'a' * 5

32. Question 32

Which of the following will put a string into variable s?

1. ☐

String s = "Some Value"

2. ☐

s = string("Enter value ")

3. ☐

s = string(input("Enter value "))

4. ☐

s = input("Enter value ")

33. Question 33

Which of the following are TRUE?

1. ☐

The values of a dictionary can be accessed using keys

2. ☐

All the keys in a dictionary must be strings

3. ☐

The keys of a dictionary can be accessed using values

4. ☐

Items are accessed by their index position in a dictionary