

Polls



Multiple Choice

Operator Precedence

Please predict the outcome of the following expression WITHOUT using a Python interpreter:

$1 + 2 ** 3 ** 2 \% 5$

A 1

B 2

C 3

D 4

SUBMIT



Multiple Choice

Boolean

What does `print(1.1 + 2.2 == 3.3)` return?

A True

B False

SUBMIT



Multiple Choice

Boolean

`bool()` returns the boolean value of a specified object. The object will always return True, unless:

A The object is empty, like `[]`, `()`, `{}`

B The object is False

C The object is 0

D The object is None

SUBMIT



Multiple Choice

Mutability

What is printed by the following statements?

```
alist = [4,2,8,6,5]
```

```
blist = alist
```

```
blist[3] = 999
```

```
print(alist)
```

A [4,2,8,6,5]

B [4,2,8,999,5]

C [4,2,999,6,5]

D [3, 999]

SUBMIT



Multiple Choice

Mutability

What is printed by the following statements?

```
alist = [1,2,3,4,5]
```

```
blist = alist * 2
```

```
blist[3] = 999
```

```
print(alist)
```

A [1,2,3,4,5]

B [1,2,3,4,5,1,2,3,4,5]

C [1,2,3,999,5]

D [1,2,3,999,5,1,2,3,4,5]

SUBMIT

A Free Text

Nested Structure

```
1 numbers = [4,5,6]
2 j=0
3 total = 0
4
5 while j < 3:
6     k = j
7     while k < 3:
8         total = total + numbers[k]
9         k += 1
10    j += 1
11
12 print(total)
```

32

SUBMIT

2 / 800

ii. Multiple Choice

```
1 class Dog:
2     def walk(self):
3         return "*walking*"
4     def speak(self):
5         return 'Woof!'
6     def eating(self):
7         return 'nom nom nom'
8
9 class Poodle(Dog):
10    def eating(self):
11        return 'NOM NOM NOM'
12
13 toffee = Poodle()
14 print(toffee.speak())
```

A Woof!

B *walking*

C AttributeError: 'Poodle' object has no attribute 'speak'

D 'NOM NOM NOM'

SUBMIT



Multiple Choice

```
b = dict()
b[1]
```

A ValueError

B IndexError

C TypeError

D KeyError

SUBMIT



Multiple Choice

```
a = []  
b = dict()  
b[a]
```

A ValueError

B IndexError

C TypeError

D KeyError

SUBMIT



Multiple Choice

Suppose you are doing a sequential search of the list [24, 12, 34, 5, 3, 2, 11, 34]. How many comparisons would you need to do in order to find the number 34?

A 8

B 3

C 2

D 1

SUBMIT



Multiple Choice

Suppose you are doing a sequential search of the ordered list [1, 4, 6, 8, 10, 11, 33, 44, 55]. How many comparisons would you need to do in order to find the number 22?

A 9

B 8

C 7

D 6

SUBMIT



Multiple Choice

Suppose you have the following sorted list [3, 5, 6, 8, 11, 12, 14, 15, 17, 18] and are using the recursive binary search algorithm. Which group of numbers correctly shows the sequence of comparisons used to search for the key 16?


A 3,5,6,8,11,12,14,15,17

B 18, 17, 15

C 12, 17, 15

D 11, 15, 17

SUBMIT

 Free Text

A list of items [22, 1, 4, 33, 2] is given in random order, and we would like to arrange the items using bubble sort. Please write down the list after each iteration. E.g.,

first iteration: []

secon iteration: []

[1,4,22,2,33];



SUBMIT

27 / 800

 Free Text

A list of items [22, 1, 4, 33, 2] is given in random order, and we would like to arrange the items using selection sort. Please write down the list after each iteration. E.g.,

first iteration: []

secon iteration: []

[1,22,4,33,2];



SUBMIT

27 / 800

 Free Text

A list of items [22, 1, 4, 33, 2] is given in random order, and we would like to arrange the items using insertion sort. Please write down the list after each iteration. E.g.,

first iteration: []

secon iteration: []

[1,22,4,33,2];



SUBMIT

27 / 800