PCAP-31-03 Vorbereitung

Number: 000-000
Number of Questions: 40
Passing Score: 700
Time Limit: 65 min
File Version: 1.5.0

QUESTION 255
What will be the value of the i variable when the while loop finishes its execution?

```
i = 0
while i != 0:
    i = i - 1
else:
    i = i + 1
```

A. 1
B. 0
C. 2
D. the variable becomes unavailable

[redacted]

Explanation/Reference:

QUESTION 256
Operator able to perform bitwise shifts is coded as (Choose two.)

A. --
B. ++
C. <<
D. >>

[redacted]

QUESTION 257
What will the value of the i variable be when the following loop finishes its execution?

```
for i in range(10):
    pass
```

A. 10
B. the variable becomes unavailable
C. 11
D. 9

[redacted]
Explanation

Explanation/Reference:

QUESTION 258
The following expression -
1+-2
is:

A. equal to 1
B. invalid
C. equal to 2
D. equal to -1

[redacted]

QUESTION 259
A compiler is a program designed to (Choose two.)

A. rearrange the source code to make it clearer
B. check the source code in order to see of it's correct
C. execute the source code
D. translate the source code into machine code

Explanation

Explanation/Reference:

QUESTION 260
What is the output of the following piece of code?

```
a = 'ant'
b = "bat"
c = 'camel'
print(a, b, c, sep="")     #  '+"+ '
```

A. ant'bat'camel
B. ant"bat"camel
C. antbatcamel
D. print(a, b, c, sep= "")

Explanation

Explanation/Reference:

QUESTION 261
What is the expected output of the following snippet?

```
i = 5
while i > 0:
    i = i // 2
    if i % 2 = 0:
        break
else:
    i += 1
print(i)
```

A. the code is erroneous
B. 3
C. 7
D. 15

Explanation

Explanation/Reference:

QUESTION 262
How many lines does the following snippet output?

```
for i in range(1, 3):
    print("*", end="")
else:
    print("*")
```

A. three
B. one
C. two
D. four

Explanation

Explanation/Reference:

QUESTION 263
Which of the following literals reflect the value given as 34.23? (Choose two.)

A. .3423e2
B. 3423e-2
C. .3423e-2
D. 3423e2

QUESTION 264
What is the expected output of the following snippet?

```
a = 2
if a > 0:
    a += 1
    else:
        a -= 1
print(a)
```

A. 3
B. 1
C. 2
D. the code is erroneous

QUESTION 265
Assuming that the following snippet has been successfully executed, which of the equations are True? (Choose two.)

```
a = [1]
b = a
a[0] = 0
```

A. len(a) == len(b)
B. b[0] +1 == a[0]
C. a[0] == b[0]
D. a[0] + 1 == b[0]

QUESTION 266
Assuming that the following snippet has been successfully executed, which of the equations are False? (Choose two.)

```
a = [0]
b = a[:]
a[0] = 1
```

A. len(a) == len(b)
B. a[0] - 1 == b[0]
C. a[0] == b[0]
D. b[0] - 1 == a[0]

[redacted]

QUESTION 267
Which of the following statements are true? (Choose two.)

A. Python strings are actually lists
B. Python strings can be concatenated
C. Python strings can be sliced like lists
D. Python strings are mutable

[redacted]

QUESTION 268
Which of the following sentences are true? (Choose two.)

A. Lists may not be stored inside tuples
B. Tuples may be stored inside lists
C. Tuples may not be stored inside tuples
D. Lists may be stored inside lists

[redacted]

QUESTION 269
Assuming that String is six or more letters long, the following slice
string[1:-2]
is shorter than the original string by:

A. four chars
B. three chars
C. one char
D. two chars

[redacted]

QUESTION 270
What is the expected output of the following snippet?

```
lst = [1, 2, 3, 4]
lst = lst[-3:-2]
lst = lst[-1]
print(lst)
```

A. 1
B. 4
C. 2
D. 3

[redacted]

QUESTION 271
What is the expected output of the following snippet?

```
s = 'abc'
for i in len(s):
    s[i] = s[i].upper()
print(s)
```

A. abc
B. The code will cause a runtime exception
C. ABC
D. 123

[redacted]

QUESTION 272
How many elements will the list2 list contain after execution of the following snippet?

```
list1 = [False for i in range(1, 10)]
list2 = list1[-1:1:-1]
```

A. zero
B. five
C. seven
D. three

[redacted]

QUESTION 273
What would you used instead of XXX if you want to check eather a certain 'key' exists in a dictionary called dict? (Choose two.)

```
if XXX:
    print("Key exists")
```

A. 'key' in dict
B. dict['key'] != None
C. dict.exists('key')
D. 'key' in dict.keys( )

[redacted]

QUESTION 274
You need data which can act as a simple telephone directory. You can obtain it with the following clauses (Choose two.) (assume that no other items have been created before)

A. dir={'Mom': 5551234567, 'Dad': 5557654321}
B. dir= {'Mom': '5551234567', 'Dad': '5557654321'}
C. dir= {Mom: 5551234567, Dad: 5557654321}
D. dir= {Mom: '5551234567', Dad: '5557654321'}

[redacted]

QUESTION 275
Can a module run like regular code?

A. yes, and it can differentiate its behavior between the regular launch and import
B. it depends on the Python version
C. yes, but in cannot differentiate its behavior between the regular launch and import
D. no, it is not possible; a module can be imported, not run

Explanation

Explanation/Reference:

QUESTION 276
Select the valid fun() invocations:
(Choose two.)

```
def fun(a, b=0):
    return a * b
```

A. fun(b=1)
B. fun(a=0)
C. fun(b=1, 0)
D. fun(1)

Explanation

Explanation/Reference:

QUESTION 277
A file name like this one below says that:
(Choose three.)

services.cpython-36.pyc

A. the interpreter used to generate the file is version 3.6
B. it has been produced by CPython
C. it is the 36 version of the file
D. the file comes from the services.py source file

Explanation

Explanation/Reference:

QUESTION 278
What is the expected behavior of the following snippet?

```
def a(x, y):
    return x[y]

print(a(0, [1]))
```

A. cause a runtime exception
B. print 1
C. print 0,[1]
D. print [1]

QUESTION 279
What can you do if you don't like a long package path like this one?

```
import alpha.beta.gamma.delta.epsilon.zeta
```

A. you can make an alias for the name using the alias keyword
B. nothing, you need to come to terms with it
C. you can shorten it to alpha . zeta and Python will find the proper connection
D. you can make an alias for the name using the as keyword

QUESTION 280
What is the expected output of the following code?

```
str = 'abcdef'
def fun(s):
    del s[2]
    return s

print(fun(str))
```

A. abcef
B. The program will cause a runtime exception/error
C. acdef
D. abdef

QUESTION 281
What is the expected output of the following code?

```
def f(n):
    if n == 1:
        return '1'
    return str(n) + f(n - 1)

print(f(2))
```

A. 21
B. 2
C. 3
D. 12

QUESTION 282
What is the expected behavior of the following snippet?

```
def x():       # line 01
    return 2   # line 02

x = 1 + x()    # line 03
print(x)       # line 04
```

A. cause a runtime exception on line 02
B. cause a runtime exception on line 01
C. cause a runtime exception on line 03
D. print 3

QUESTION 283
What is the expected behavior of the following code?

```
def f(n):
    for i in range(1, n + 1):
        yield i

print(f(2))
```

A. print 4321
B. print <generator object f at (some hex digits)>
C. cause a runtime exception
D. print 1234

Explanation

Explanation/Reference:

QUESTION 284
If you need a function that does nothing, what would you use instead of XXX? (Choose two.)

```
def idler():
    XXXX
```

A. pass
B. return
C. exit
D. None

Explanation

Explanation/Reference:
https://www.examtopics.com//discussions/python-institute/view/70358-exam-pcap-topic-1-question-30-discussion/

QUESTION 285
Is it possible to safely check if a class/object has a certain attribute?

A. yes, by using the hasattr attribute
B. yes, by using the hasattr( ) method
C. yes, by using the hasattr( ) function
D. no, it is not possible

Explanation

Explanation/Reference:

QUESTION 286
The first parameter of each method:

A. holds a reference to the currently processed object
B. is always set to None
C. is set to a unique random value
D. is set by the first argument's value

Explanation

Explanation/Reference:

QUESTION 287
The simplest possible class definition in Python can be expressed as:

A. class X:
B. class X: pass
C. class X: return
D. class X: { }

Explanation

Explanation/Reference:

QUESTION 288
If you want to access an exception object's components and store them in an object called e, you have to use the following form of exception statement:

A. except Exception(e):
B. except e = Exception:
C. except Exception as e:
D. such an action is not possible in Python

Explanation/Reference:

QUESTION 289
A variable stored separately in every object is called:

A. there are no such variables, all variables are shared among objects
B. a class variable
C. an object variable
D. an instance variable

Explanation

Explanation/Reference:

QUESTION 290
There is a stream named s open for writing. What option will you select to write a line to the stream?

A. s.write("Hello\n")
B. write(s, "Hello")
C. s.writeln("Hello")
D. s.writeline("Hello")

QUESTION 291
You are going to read just one character from a stream called s. Which statement would you use?

A. ch = read(s, 1)
B. ch = s.input(1)
C. ch = input(s, 1)
D. ch = s.read(1)

QUESTION 292
What can you deduce from the following statement? (Choose two.)

```
str = open('file.txt', 'rt')
```

A. str is a string read in from the file named file.txt
B. a newline character translation will be performed during the reads
C. if file. txt does not exist, it will be created
D. the opened file cannot be written with the use of the str variable

Explanation

Explanation/Reference:

QUESTION 293
The following class hierarchy is given. What is the expected out of the code?

```
class A:
    def a(self):
        print("A", end=' ')
    def b(self):
        self.a()

class B(A):
    def a(self):
        print("B", end=' ')
    def do(self):
        self.b()

class C(A):
    def a(self):
        print("C", end=' ')
    def do(self):
        self.b()

B().do()
C().do()
```

A. B B
B. C C
C. A A
D. B C

Explanation

Explanation/Reference:

QUESTION 294
Python's built in function named open() tries to open a file and returns:

A. an integer value identifying an opened file
B. an error code (0 means success)
C. a stream object
D. always None

Explanation

Explanation/Reference:

QUESTION 295
Which of the following words can be used as a variable name? (Choose two.)

A. for
B. True
C. true
D. For

Explanation

Explanation/Reference:

QUESTION 296
Python strings can be `glued` together using the operator:

A. .
B. &
C. _
D. +

Explanation

Explanation/Reference:

QUESTION 297
A keyword (Choose two.)

A. can be used as an identifier
B. is defined by Python's lexis
C. is also known as a reserved word
D. cannot be used in the user's code

Explanation

Explanation/Reference:

QUESTION 298
How many stars (*) does the snippet print?

```
s = '*****'
s = s - s[2]
print(s)
```

A. the code is erroneous
B. five
C. four
D. two

Explanation
Explanation/Reference:

QUESTION 299
Which line can be used instead of the comment to cause the snippet to produce the following expected output? (Choose two.)

Expected output:
1 2 3
Code:

```
c, b, a = 1, 3, 2
# put line here
print(a, b, c)
```

A. c, b, a = b, a, c
B. c, b, a = a, c, b
C. a, b, c = c, a, b
D. a, b, c = a, b, c

Explanation

Explanation/Reference:

QUESTION 300
Assuming that the V variable holds an integer value to 2, which of the following operators should be used instead of OPER to make the expression equal to 1?

V OPER 1

A. <<<
B. >>>
C. >>
D. <<

Explanation

Explanation/Reference:

QUESTION 301
How many stars (*) does the following snippet print?

```
i = 3
while i > 0:
    i -= 1
    print("*")
else:
    print("*")
```

A. the code is erroneous
B. five
C. three
D. four

Section: (none)
Explanation

Explanation/Reference:

QUESTION 302
UNICODE is:

A. the name of an operating system
B. a standard for encoding and handling texts
C. the name of a programming language
D. the name of a text processor

Explanation

Explanation/Reference:

QUESTION 303
What is the expected output of the following snippet?

```
s = '*-*'
s = 2 * s + s * 2
print(s)
```

A. *-**-**-**-*
B. *-**-**-**-**-**-**-**-*
C. *-*
D. *-**-*

Explanation

Explanation/Reference:

QUESTION 304
Which of the listed actions can be applied to the following tuple? (Choose two.)

```
tup = ()
```

A. tup[:]
B. tup.append(0)
C. tup[0]
D. del tup

Explanation

Explanation/Reference:

QUESTION 305
Executing the following snippet -

```
dct = {'pi': 3.14}

dct['pi'] = 3.1415
```

A. to hold two keys named 'pi' linked to 3.14 and 3.1415 respectively
B. to hold two key named 'pi' linked to 3.14 and 3.1415
C. to hold one key named 'pi' linked to 3.1415
D. to hold two keys named 'pi' linked to 3.1415

Explanation

Explanation/Reference:

QUESTION 306

How many elements will the list1 list contain after execution of the following snippet?

list1 = "don't think twice, do it!".split(',')

A. two
B. zero
C. one
D. three

[redacted]

QUESTION 307

Which of the equations are True? (Choose two.)

A. chr(ord(x)) == x
B. ord(ord(x)) == x
C. chr(chr(x)) == x
D. ord(chr(x)) == x

[redacted]

Explanation

Explanation/Reference:

https://www.examtopics.com//discussions/python-institute/view/65147-exam-pcap-topic-1-question-53-discussion/

https://www.examtopics.com//discussions/python-institute/view/17141-exam-pcap-topic-1-question-53-discussion/

QUESTION 308

If you want to transform a string into a list of words, what invocation would you use? (Choose two.)
Expected output:

```
The, Catcher, in, the, Rye,
```

Code:

```
s = "The Catcher in the Rye"
l = # put a proper invocation here
for w in l:
    print(w, end=', ') # outputs: The, Catcher, in, the, Rye,
```

A. s.split()
B. split(s, ' ')
C. s.split(' ')
D. split(s)

[redacted]

QUESTION 309

Assuming that lst - is a four-element list. Is there any difference between these two statements?

```
del lst # the first line
del lst[:] # the second line
```

A. yes, there is, the first line empties the list, the second line deletes the list as a whole
B. yes, there is, the first line deletes the list as a whole, the second line just empties the list
C. no, there is no difference
D. yes, there is, the first line deletes the list as a whole, the second line removes all the elements except the first one

[redacted]

QUESTION 310
What should you put instead of XXX to print out the module name?

```
if __name___ != "XXX":
    print(__name__)
```

A. main
B. _main_
C. __main__
D. ___main___

Explanation

Explanation/Reference:

QUESTION 311
Files with the suffix.pyc contain:

A. Python 4 source code
B. backups
C. temporary data
D. semi-compiled Python code

Section: (none)
Explanation

Explanation/Reference:

QUESTION 312
Package source directories/folders can be:

A. converted into the so-called pypck format
B. packed as a ZIP file and distributed as one file
C. rebuilt to a flat form and distributed as one directory/folder
D. removed as Python compiles them into an internal portable format

Explanation

Explanation/Reference:

QUESTION 313
What can you deduce from the line below? (Choose two.)

```
x = a.b.c.f()
```

A. import a.b.c should be placed before that line
B. f() is located in module c of subpackage b of package a
C. the line is incorrect
D. the function being invoked is called a.b.c.f()

Explanation

Explanation/Reference:

QUESTION 314
A two-parameter lambda function raising its first parameter to the power of the second parameter should be declared as:

A. lambda (x, y) = x ** y
B. lambda (x, y): x ** y
C. def lambda (x, y): return x ** y
D. lambda x, y: x ** y

QUESTION 315
What is the expected output of the following code?

```
def f(n):
    if n == 1:
        return 1
    return n + f(n - 1)
print(f(2))
```

A. 21
B. 12
C. 3
D. None

QUESTION 316
A method for passing the arguments used by the following snippet is called:

```
def fun(a, b):
    return a + b

res = fun(1, 2)
```

A. sequential
B. named
C. positional
D. keyword

Explanation

Explanation/Reference:

QUESTION 317
What is the expected behavior of the following code?

```
def f(n):
    for i in range(1, n + 1):
        yield i

for i in f(2):
    print(i, end=' ')
```

A. print 2 1
B. print 1 2
C. cause a runtime exception
D. print <generator object f at (some hex digits)>

QUESTION 318
What is the expected output of the following code?

```
lst = [x for x in range(5)]

lst = list(filter(lambda x: x % 2 == 0, lst))
print(len(lst))
```

A. 2
B. The code will cause a runtime exception
C. 1
D. 3

Explanation

Explanation/Reference:

QUESTION 319
What is the expected behavior of the following code?

```
def unclear(x):
    if x % 2 == 1:
        return 0

print(unclear(1) + unclear(2))
```

A. prints 0
B. cause a runtime exception
C. prints 3
D. print an empty line

Explanation

Explanation/Reference:

QUESTION 320
If any of a class's components has a name that starts with two underscores (___), then:

A. the class component's name will be mangled
B. the class component has to be an instance variable
C. the class component has to be a class variable
D. the class component has to be a method

Explanation

Explanation/Reference:

QUESTION 321
If you need to serve two different exceptions called Ex1 and Ex2 in one except branch, you can write:

A. except Ex1 Ex2:
B. except (Ex1, Ex2):
C. except Ex1, Ex2:
D. except Ex1+Ex2:

Explanation

QUESTION 322
A function called issubclass(c1, c2) is able to check if:

A. c1 and c2 are both subclasses of the same superclass
B. c2 is a subclass of c1
C. c1 is a subclass of c2
D. c1 and c2 are not subclasses of the same superclass

[redacted]
Explanation

Explanation/Reference:

QUESTION 323
A class constructor (Choose two.)

A. can return a value
B. cannot be invoked directly from inside the class
C. can be invoked directly from any of the subclasses
D. can be invoked directly from any of the superclasses

[redacted]
Explanation

Explanation/Reference:
From Python Institute:
Note that the constructor:
cannot return a value, as it is designed to return a newly created object and nothing else;
cannot be invoked directly either from the object or from inside the class (you can invoke a constructor from any of the object's subclasses, but we'll discuss this issue later.)

https://www.examtopics.com//discussions/python-institute/view/16489-exam-pcap-topic-1-question-69-discussion/

https://www.examtopics.com//discussions/python-institute/view/104004-exam-pcap-topic-1-question-69-discussion/

QUESTION 324
The following class definition is given. We want the show() method to invoke the get() method, and then output the value the get() method returns. Which of the invocations should be used instead of XXX?

```
class Class:
    def __init__(self, val):
        self.val = val
    def get(self):
        return self.val
    def show(self):
        XXX
```

A. print(get(self))
B. print(self.get())
C. print(get())
D. print(self.get(val))

[redacted]

Explanation/Reference:

QUESTION 325
If s is a stream open for reading, what do you expect from the following invocation?

```
c = s.read()
```

A. one line of the file will be read and stored in the string called c
B. the whole file content will be read and stored in the string called c
C. one character will be read and stored in the string called c
D. one disk sector (512 bytes) will be read and stored in the string called c

QUESTION 326
You are going to read 16 bytes from a binary file into a bytearray called data. Which lines would you use? (Choose two.)

A. data = bytearray(16); bf.readinto(data)
B. data = binfile.read(bytearray(16))
C. bf.readinto(data = bytearray(16))
D. data = bytearray(binfile.read(16))

QUESTION 327
What is the expected output of the following snippet?

```
class X:
    pass
class Y(X):
    pass
class Z(X):
    pass

x = Z()
z = Z()
print(isinstance(x, Z), isinstance(z, X))
```

A. True False
B. True True
C. False False
D. False True

QUESTION 328
Assuming that the code below has been executed successfully, which of the following expressions will always evaluate to True? (Choose two.)

```
import random

random.seed(1)
v1 = random.random()
random.seed(1)
v2 = random.random()
```

A. v1 >= 1
B. v1 == v2
C. len(random.sample([1, 2, 3], 2)) > 2
D. random.choice([1, 2, 3]) >= 1

QUESTION 329
Which one of the platform module functions should be used to determine the underlying platform name?

A. platform.python_version()
B. platform.processor()
C. platform.platform()
D. platform.uname()

[redacted]
Explanation

Explanation/Reference:

QUESTION 330
What is the expected output of the following code?

```
import sys
import math

b1 = type(dir(math)[0]) is str
b2 = type(dir(sys.path)[-1]) is str
print(b1 and b2)
```

A. False
B. None
C. True
D. 0

[redacted]
Explanation

Explanation/Reference:

QUESTION 331
With regards to the directory structure below, select the proper forms of the directives in order to import module_a. (Choose two.)

```
pypack (dir)
|
|-- upper (dir)
|  |
|  |-- lower (dir)
|  |   |
|  |   |_ module_c.py (file)
|  |
|  |_ module_b.py (file)
|
|_ module_a.py (file)
```

A. from pypack import module_a
B. import module_a from pypack
C. import module_a
D. import pypack.module_a

[redacted]

[redacted]**Reference:**

QUESTION 332
A Python module named pymod.py contains a function named pyfun().
Which of the following snippets will let you invoke the function? (Choose two.)

A. import pymod
   pymod.pyfun()
B. from pymod import pyfun
   pyfun()
C. from pymod import *
   pymod.pyfun()
D. import pyfun from pymod
   pyfun()

Explanation

Explanation/Reference:

QUESTION 333
What is true about Python packages? (Choose two.)

A. a package is a single file whose name ends with the pa extension
B. a package is a group of related modules
C. the __name__variable always contains the name of a package
D. the pyc extension is used to mark semi-compiled Python packages

Explanation

Explanation/Reference:

QUESTION 334
What is the expected behavior of the following code?

```
m = 0
def foo(n):
    global m
    assert m == 0
    try:
        return 1 / n
    except ArithmeticError:
        m += 1
        raise

try:
    foo(0)
except ArithmeticError:
    m += 2
except:
    m += 1

print(m)
```

A. it outputs 3
B. it outputs 1
C. the code is erroneous and it will not execute
D. it outputs 2

Explanation

Explanation/Reference:

QUESTION 335

What is the expected behavior of the following code?

```
s = '2A'

try:
    n = int(s)
except TypeError:
    n = 3
except LookupError:
    n = 2
except:
    n = 1

print(n)
```

A. it outputs 3
B. the code is erroneous and it will not execute
C. it outputs 1
D. it outputs 2

[redacted]

Explanation

Explanation/Reference:

QUESTION 336

Which of the following snippets will execute without raising any unhandled exceptions? (Choose two.)

A.
```
try:
    print(0/0)
except:
    print(0/1)
else:
    print(0/2)
```

B.
```
try:
    print(int("0"))
except NameError:
    print("0")
else:
    print(int(""))
```

C.
```
import math
try:
    print(math.sqrt(-1))
except:
    print(math.sqrt(0))
else:
    print(math.sqrt(1))
```

D.
```
try:
    print(float("1e1"))
except (NameError, SystemError):
    print(float("1a1"))
else:
    print(float("1c1"))
```

[redacted]

Explanation

Explanation/Reference:

QUESTION 337
What is the expected behavior of the following code?

```
my_list = [1, 2, 3]

try:
    my_list[3] = my_list[2]
except BaseException as error:
    print(error)
```

A. it outputs error
B. it outputs <class 'IndexError'>
C. it outputs list assignment index out of range
D. the code is erroneous and it will not execute

[redacted]

QUESTION 338
What is true about the following snippet? (Choose two.)

```
class E(Exception):
    def __init__(self, message):
        self.message = message
    def __str__(self):
        return "it's nice to see you"

try:
    print("I feel fine")
    raise Exception("what a pity")
except E as e:
    print(e)
else:
    print("the schow must go on")
```

A. the string it's nice to see you will be seen
B. the string I feel fine will be seen
C. the code will raise an unhandled exception
D. the string what a pity will be seen

[redacted]

QUESTION 339
Which of the following expressions evaluate to True? (Choose two.)

A. ord("Z") - ord("z") == ord("0")
B. chr(ord('A') + 1) == 'B'
C. len('\'') == 1 # (' \ ' ')
D. len("""" """") == 0

[redacted]

QUESTION 340
Which of the following invocations are valid? (Choose two.)

A. "python".sort()
B. sorted("python")
C. rfind("python", "r")
D. "python".index("th")

QUESTION 341
What is the expected behavior of the following code?

```
string = str(1 / 3)
dummy = ''
for character in string:
    dummy = character + dummy
print(dummy[-1])
```

A. it raises an exception
B. it outputs 0
C. it outputs 3
D. it outputs 'None'

Explanation

Explanation/Reference:

QUESTION 342
Which of the following statements are true? (Choose two.)

A. II in ASCII stands for Information Interchange
B. a code point is a number assigned to a given character
C. ACII is synonymous with UTF-8
D. \e is an escape sequence used to mark the end of lines

Explanation

Explanation/Reference:

QUESTION 343
Which of the following expressions evaluate to True? (Choose two.)

A. str(1-1) in '0123456789'
B. 'dcb' not in 'abcde'[::-1]
C. 'phd' in 'alpha'
D. 'True' not in 'False'

Explanation

Explanation/Reference:

QUESTION 344
What is the expected behavior of the following code?

```
the_list = "alpha;beta;gamma".split(":")
the_string = ''.join(the_list)
print(the_string.isalpha())
```

A. it raises an exception
B. it outputs True
C. it outputs False
D. it outputs nothing

Explanation

Explanation/Reference:

QUESTION 345

Which of the following expressions evaluate to True? (Choose two.)

A. 121 + 1 != '1' + 2 * '2'
B. '1' + '1' + '1' < '1' * 3
C. 'AbC'.lower() < 'AB'
D. '3.14' != str(3.1415)

[redacted]

Explanation

Explanation/Reference:

QUESTION 346

Assuming that the snippet below has been executed successfully, which of the following expressions evaluate to True?

```
string = 'python'[::2]
string = string[-1] + string[-2]
```

A. string[0] == 'o'
B. string is None
C. len(string) == 3
D. string[0] == string [-1]

[redacted]

Explanation

Explanation/Reference:

QUESTION 347

What is the expected behavior of the following code?

```
class Super:
    def make(self):
        return 0
    def doit(self):
        return self.make()

class Sub_A(Super):
    def make(self):
        return 1

class Sub_B(Super):
    pass

a = Sub_A()
b = Sub_B()
print(a.doit() + b.doit())
```

A. it outputs 0
B. it outputs 1
C. it raises an exception
D. it outputs 2

[redacted]

Explanation

Explanation/Reference:

QUESTION 348
Assuming that the following inheritance set is in force, which of the following classes are declared properly? (Choose two.)

```
class A:
    pass
class B(A):
    pass
class C(A):
    pass
class D(B):
    pass
```

A.
```
class Class_4(D, A):
    pass
```

B.
```
class Class_3(A, C):
    pass
```

C.
```
class Class_2(B, D):
    pass
```

D.
```
class Class_1(C, D):
    pass
```

[redacted]
Explanation

Explanation/Reference:

QUESTION 349
What is the expected output of the following snippet?

```
class Upper:

    def method(self):
        return 'upper'

class Lower(Upper):
    def method(self):
        return 'lower'

Object = Upper()
print(isinstance(Object, Lower), end=' ')
print(Object.method())
```

A. True upper
B. True lower
C. False upper
D. False lower

[redacted]
Explanation

Explanation/Reference:

QUESTION 350
Assuming that the code below has been placed inside a file named code.py and executed successfully, which of the following expressions evaluate to True?
(Choose two.)

```
class ClassA:
    var = 1
    def __init__(self, prop):
        prop1 = prop2 = prop
    def __str__(self):
        return 'Object'

class ClassB(ClassA):
    def __init__(self, prop):
        prop3 = prop ** 2
        super().__init__(prop)

Object = ClassB(2)
```

A. len(ClassA.__bases _) == 2
B. ClassA.__module___== '__main__'
C. __name___== 'code.py'
D. str(Object) == 'Object'

Explanation

Explanation/Reference:

QUESTION 351
What is the expected behavior of the following code?

```
class Class:
    __Var = 0
    def foo(self):
        Class._Class___ar += 1
        self.__prop = Class._Class__Var
o1 = Class()
o1.foo()
o2 = Class()
o2.foo()
print(o2._Class__Var + o1._Class__prop)
```

A. it outputs 1
B. it outputs 3
C. it outputs 6
D. it raises an exception

Explanation

Explanation/Reference:

QUESTION 352
What is the expected behavior of the following code?

```
class Class:
    Variable = 0
    def __init__(self):
        self.value = 0

object_1 = Class()
object_1.Variable = 1
object_2 = Class()
object_2.value += 1
print(object_2.Variable + object_1.value)
```

A. it outputs 0
B. it raises an exception
C. it outputs 1
D. it outputs 2

Explanation

Explanation/Reference:

QUESTION 353
What is true about Object-Oriented Programming in Python? (Choose two.)

A. each object of the same class can have a different set of methods
B. a subclass is usually more specialized than its superclass
C. if a real-life object can be described with a set of adjectives, they may reflect a Python object method
D. the same class can be used many times to build a number of objects

Explanation

Explanation/Reference:

QUESTION 354
What is true about Python class constructors? (Choose two.)

A. there can be more than one constructor in a Python class
B. the constructor must return a value other than None
C. the constructor is a method named __init___
D. the constructor must have at least one parameter

Explanation

Explanation/Reference:

QUESTION 355
Assuming that the following piece of code has been executed successfully, which of the expressions evaluate to True? (Choose two.)

```
class A:
   VarA = 1
   def __init__(self):
      self.prop_a = 1

class B(A):
   VarA = 2
   def __init__(self):
      super().__init__()
      self.prop_b = 2

obj_a = A()
obj_aa = A()
obj_b = B()
obj_bb = obj_b
```

A. isinstance(obj_a, A)
B. A.VarA == 1
C. obj_a is obj_aa
D. B.VarA == 1

QUESTION 356
Assuming that the code below has been executed successfully, which of the expressions evaluate to True? (Choose two.)

```
class Class:
   var = data = 1
   def __init__(self, value):
      self.prop = value

Object = Class(2)
```

A. len(Class.__dict__) == 1
B. 'data' in Class.__dict__
C. 'var' in Class.__dict__
D. 'data' in Object.__dict__

Explanation

Explanation/Reference:

QUESTION 357
A property that stores information about a given class's super-classes is named:

A. __upper__
B. __super__
C. __ancestors__
D. __bases__

Explanation

Explanation/Reference:

QUESTION 358
Which of the following lines of code will work flawlessly when put independently inside the add_new() method in order to make the snippet's output equal to [0, 1, 2]? (Choose two.)

```
class MyClass:
    def __init__(self, size):
        self.queue = [i for i in range(size)]

    def get(self):
        return self.queue

    def get_last(self):
        return self.queue[-1]

    def add_new(self):
        # insert the line of the code here

Object = MyClass(2)
Object.add_new()
print(Object.get())
```

A. self.queue.append(self.get_last() + 1)
B. self.queue.append(get_last() + 1)
C. self.queue.append(self.queue[-1] + 1)
D. queue.append(self.get_last() + 1)

QUESTION 359
What is the expected output of the following code?

```
mytu = ('a', 'b', 'c')
m = tuple(map(lambda x: chr(ord(x) + 1), mytu))
print(m[-2])
```

A. a
B. c
C. an exception is raised
D. b

QUESTION 360
What is the expected output of the following code if there is no file named non_existing_file inside the working directory?

```
try:
    f = open('non_existing_file', 'w')
    print(1, end=' ')
    s = f.readline()
    print(2, end=' ')
except IOError as error:
    print(3, end=' ')
else:
    f.close()
    print(4, end=' ')
```

A. 1 2 4
B. 1 2 3 4
C. 2 4
D. 1 3

QUESTION 361
What is the expected output of the following code if the file named existing_text_file is a non-zero length text file located inside the working directory?

```
try:
    f = open('existing_text_file', 'w')
    d = f.readline()
    print(len(d))
    f.close()
except IOError:
    print(-1)
```

A. the length of the first line from the file
B. -1
C. the number of lines contained inside the file
D. the length of the last line from the file

Explanation

Explanation/Reference:

QUESTION 362
What is the expected behavior of the following code?

```
my_list = [i for i in range(5)]
m = [my_list[i] for i in range(4, 0, -1) if my_list[i] % 2 != 0]
print(m)
```

A. it outputs [1, 3]
B. the code is erroneous and it will not execute
C. it outputs [3, 1]
D. it outputs [4, 2, 0]

Explanation

Explanation/Reference:

QUESTION 363
Assuming that the following code has been executed successfully, which of the expressions evaluate to True? (Choose two.)

```
def f(x, y):
    nom, denom = x, y
    def g():
        return nom / denom
    return g

a = f(1, 2)
b = f(3, 4)
```

A. b() == 4
B. a != b
C. a is not None
D. a() == 4

Explanation/Reference:

QUESTION 364
What is the expected output of the following code?

```
def foo(x, y):
   return y(x) + (x + 1)

print(foo(1, lambda x: x*x))
```

A. 3
B. 5
C. 4
D. an exception is raised

[redacted]

Explanation/Reference:

QUESTION 365
Which of the following lambda definitions are correct? (Choose two.)

A. lambda x,y: (x,y)
B. lambda x,y: return x//y - x%y
C. lambda x,y: x//y - x%y
D. lambda x,y = x//y - x%y

[redacted]

Explanation/Reference:

QUESTION 366
Which of the following statements are true? (Choose two.)

A. if invoking open() fails, an exception is raised
B. open() requires a second argument
C. open() is a function which returns an object that represents a physical file
D. instd, outstd. errstd are the names of pre-opened streams

[redacted]

QUESTION 367
What is the expected behavior of the following code?

```
x = 3 % 1
y = 1 if x > 0 else 0
print(y)
```

A. the code is erroneous and it will not execute
B. it outputs 1
C. it outputs -1
D. it outputs 0

[redacted]

Explanation

Explanation/Reference:

QUESTION 368
Which of the following snippets will execute without raising any unhandled exceptions? (Choose two.)

A.
```
try:
    print(float("1e1"))
except (ValueError, NameError):
    print(float("1a1"))
else:
    print(float("101"))
```

B.
```
try:
    print(1/1)
except:
    print(2/1)
else:
    print(3/0)
```

C.
```
try:
    print(1/0)
except ValueError:
    print(1/1)
else:
    print(1/2)
```

D.
```
try:
    print(0/1)
except:
    print(1/1)
else:
    print(2/1)
```

[redacted]

QUESTION 369
Which of the following expressions evaluate to True? (Choose two.)

A. '8' + '8' != 2 * '8'
B. 'xYz'.lower() > 'XY'
C. float('3.14') == str('3.' + '14')
D. 121 + 1 == int('1' + 2 * '2')

[redacted]

QUESTION 370
What is the expected behavior of the following code?

```
class Class:
    Var = 0
    def _foo(self):
        Class.Var += 1
        return Class.Var

o = Class()
o.__Class_foo()
print(o.__Class_foo())
```

A. it raises an exception
B. it outputs 3
C. it outputs 1
D. it outputs 6

[redacted]

QUESTION 371
What is the expected behavior of the following code?

```
x = 8 ** (1 / 3)
y = 2. if x < 2.3 else 3.
print(y)
```

A. the code is erroneous and it will not execute
B. it outputs 2.0
C. it outputs 2.5
D. it outputs 3.0

Explanation

Explanation/Reference:

QUESTION 372
What is the expected behavior of the following code?

```
my_list = [i for i in range(5, 0, -1)]
m = [my_list[i] for i in range(5) if my_list[i] % 2 == 0]
print(m)
```

A. it outputs [4, 2]
B. it outputs [2, 4]
C. it outputs [0, 1, 2, 3, 4]
D. the code is erroneous and it will not execute

Explanation

Explanation/Reference:

QUESTION 373
The __bases__property contains:

A. base class location (addr)
B. base class objects (class)
C. base class names (str)
D. base class ids (int)

Section: (none)
Explanation

Explanation/Reference:

QUESTION 374
What is the expected behavior of the following code?

```
class Super:
    def make(self):
        pass
    def doit(self):
        return self.make()

class Sub_A(Super):
    def make(self):
        return 1

class Sub_B(Super):
    pass

a = Sub_A()
b = Sub_B()
print(a.doit() + b.doit())
```

A. it outputs 0
B. it raises an exception
C. it outputs 1
D. it outputs 2

Explanation

Explanation/Reference:

QUESTION 375
Which of the following statements are true? (Choose two.)

A. an escape sequence can be recognized by the / sign put in front of it
B. II in ASCII stands for Internal Information
C. ASCII is a subset of UNICODE
D. a code point is a number assigned to a given character

Explanation

Explanation/Reference:

QUESTION 376
What is the expected behavior of the following code?

```
string = '123'
dummy = 0
for character in reversed(string):
    dummy += int(character)
print(dummy)
```

A. it outputs 321
B. it outputs 123
C. it outputs 6
D. it raises an exception

Explanation

Explanation/Reference:

QUESTION 377
A Python module named pymod.py contains a variable named pyvar.
Which of the following snippets will let you access the variable? (Choose two.)

A. import pymod
   pymod.pyvar = 1
B. import pyvar from pymod
   pyvar = 1
C. from pymod import pyvar
   pyvar()
D. from pymod import *
   pyvar = 1

Explanation

Explanation/Reference:

QUESTION 378
Which of the following expressions evaluate to True? (Choose two.)

A. ord('a') - ord('A') == ord('0')
B. len(""" """) > 0
C. chr(ord('a') + 1) == 'B'
D. len('\'') == 1 # ' \' '

Explanation

Explanation/Reference:

QUESTION 379
What is the expected output of the following code if the file named non_zero_length_existing_text_file is a non-zero length file located inside the working directory?

```
try:
   f = open('non_zero_length_existing_text_file', 'rt')
   d = f.read(1)
   print(len(d))
   f.close()
except IOError:
   print(-1)
```

A. -1
B. 0
C. an errno value corresponding to file not found
D. 1

Explanation

Explanation/Reference:

QUESTION 380
Assuming that the code below has been executed successfully, which of the expressions evaluate to True? (Choose two.)

```
class Class:
    var = 1
    def __init__(self, value):
        self.prop = value

Object = Class(2)
```

A. 'var' in Class.__dict__
B. 'var' in Object.__dict__
C. len(Object.__dict__) == 1
D. 'prop' in Class.__dict__

Explanation

Explanation/Reference:

QUESTION 381
What is the expected behavior of the following code?

```
the_list = "1, 2, 3".split()
the_string = ''.join(the_list)
print(the_string.isdigit())
```

A. it raises an exception
B. it outputs nothing
C. it outputs True
D. it outputs False

Explanation

Explanation/Reference:

QUESTION 382
Assuming that the code below has been executed successfully, which of the following expressions will always evaluate to True? (Choose two.)

```
import random

v1 = random.random()
v2 = random.random()
```

A. v1 == v2
B. v1 < 1
C. random.choice([1, 2, 3]) > 0
D. len(random.sample([1, 2, 3], 1)) > 2

Explanation

QUESTION 383
With regards to the directory structure below, select the proper forms of the directives in order to import module_b. (Choose two.)

pypack (dir)
|
|-- **upper** (dir)
| |
| |-- **lower** (dir)
| | |
| | |_ module_c.py (file)
| |
| |_ module_b.py (file)
|
|_ module_a.py (file)

A. from pypack.upper import module_b
B. import pypack.upper.module_b
C. import upper_module_b
D. import module_b

Explanation

Explanation/Reference:

QUESTION 384
Which of the following lines of code will work flawlessly when out independently inside the inc() method in order to make the snippet's output equal to 3? (Choose two.)

```
class MyClass:
    Var = 0
    def __init__(self):
        MyClass.Var += 1
        self.prop = MyClass.Var

    def get(self):
        return self.prop

    def put(self, val):
        self.prop = val

    def inc(self, val):
        # insert the line of code here

Object = MyClass()
Object.inc(2)
print(Object.get())
```

A. put(self.prop + val)
B. self.put(get() + val)
C. self.put(self.get() + val)
D. self.put(self.prop + val)

Explanation

Explanation/Reference:

QUESTION 385
What is the expected output of the following code?

```
import sys

b1 = type(dir(sys)) is str
b2 = type(sys.path[-1]) is str
print(b1 and b2)
```

A. False
B. 0
C. None
D. True

Explanation

Explanation/Reference:

QUESTION 386
What is true about Python class constructors? (Choose two.)

A. there can be only one constructor in a Python class
B. the constructor cannot be invoked directly under any circumstances
C. the constructor cannot return a result other than None
D. the constructor's first parameter must always be named self

Explanation

Explanation/Reference:

QUESTION 387
What is the expected behavior of the following code?

```
def foo(x, y):
    return y(x) + y(x+1)

print(foo(1, lambda x: x*x))
```

A. 4
B. 3
C. an exception is raised
D. 5

Explanation

Explanation/Reference:

QUESTION 388
Assuming that the following inheritance set is in force, which of the following classes are declared properly? (Choose two.)

```
class A:
    pass
class B(A):
    pass
class C(A):
    pass
class D(B, C):
    pass
```

A. class Class_3(A, C): pass
B. class Class_4(C, B): pass
C. class Class_1(D, A): pass
D. class Class_2(A, B): pass

Explanation

Explanation/Reference:

QUESTION 389
What is the expected behavior of the following code?

```
s = '2A'

try:
    n = int(s)
except ValueError:
    n = 2
except ArithmeticError:
    n = 1
except:
    n = 0

print(n)
```

A. it outputs 0
B. the code is erroneous and it will not execute
C. it outputs 1
D. it outputs 2

Explanation

Explanation/Reference:

QUESTION 390
Which of the following expressions evaluate to True? (Choose two.)

A. 'in' in 'Thames'
B. 'in' in 'in'
C. 'in not' in 'not'
D. 't'.upper() in 'Thames'

Explanation

Explanation/Reference:

QUESTION 391
What is the expected behavior of the following code?

```
class Class:
    Variable = 0
    def _init_(self):
        self.value = 0

object_1 = Class()
Class.Variable += 1
object_2 = Class()
object_2.value += 1
print(object_2.Variable + object_1.value)
```

A. it outputs 2
B. it raises an exception
C. it outputs 1
D. it outputs 0

Explanation

Explanation/Reference:

QUESTION 392
Which of the following invocations are valid? (Choose two.)

A. sort("python")
B. "python".find("")
C. "python".rindex("th")
D. "python".sorted()

Explanation

Explanation/Reference:

QUESTION 393
What is the expected output of the following snippet?

```
class Upper:
    def __init__(self):
        self.property = 'upper'

class Lower(Upper):
    def __init__(self):
        super().__init__()

Object = Lower()
print(isinstance(Object, Lower), end=' ')
print(Object.property)
```

A. True lower
B. True upper
C. False upper
D. False lower

Explanation

Explanation/Reference:

QUESTION 394
Assuming that the snippet below has been executed successfully, which of the following expressions evaluate to True? (Choose two.)

```
string = 'SKY'[::-1]
string = string[-1]
```

A. string[0] == 'Y'
B. string[0] == string [-1]
C. string is None
D. len(string) == 1

Explanation

Explanation/Reference:

QUESTION 395
Assuming that the code below has been placed inside a file named code.py and executed successfully, which of the following expressions evaluate to True? (Choose two.)

```
class ClassA:
    var = 1
    def __init__(self, prop):
        prop1 = prop2 = prop

class ClassB(ClassA):
    def __init__(self, prop):
        prop3 = prop ** 2
        super().__init__(prop)
    def __str__(self):
        return 'Object'

Object = ClassA(2)
```

A. ClassA.__module___== '__main__'
B. __name___== '__main__'
C. str(Object) == 'Object'
D. len(ClassB.__bases _) == 2

Explanation

Explanation/Reference:

QUESTION 396
Which of the following expressions evaluate to True? (Select two answers)

A. 11 == '011'
B. 3 * 'a' < 'a' * 2
C. 'abc'.upper() < 'abc'
D. '1' + 2 * '2' != 2 * '12'

Explanation

Explanation/Reference:

QUESTION 397
Which of the following invocations are valid? (Select two answers)

A. sorted('python')
B. 'python'.sort()
C. sort('python')
D. 'python'.find(' ')

Explanation

Explanation/Reference:

QUESTION 398
What is the expected output of the following code?

```
def foo(x, y, z):
    return x(y(z))

print(foo(lambda x: 2*x, lambda x: x//2, 2))
```

A. 2
B. 3
C. 4
D. an exception is raised

Explanation

Explanation/Reference:

QUESTION 399
With regards to the directory structure below, select the proper forms of the directives in order to import module_c. (Select two answers)

pypack (dir)
|
|-- **upper** (dir)
| |
| |-- **lower** (dir)
| | |
| | |_ module_c.py (file)
| |
| |_ module_b.py (file)
|
|_ module_a.py (file)

A. from pypack.upper.lower import module_c
B. import pypack.upper.lower.module_c
C. import upper.module_c
D. import upper.lower.module_c

Explanation

Explanation/Reference:

QUESTION 400
Which of the following expression evaluate to True? (Select two answers)

A. ord('0') - ord('9') == 10
B. len('"12
34"') == 4
C. len("""") == 2 # " ' ' "
D. chr(ord('Z') - 1) == 'Y'

Explanation

Explanation/Reference:

QUESTION 401
What is the expected output of the following code if existing_file is the name of a file located inside the working directory?

```
try:
    f = open('existing_file', 'w')
    print(1, end=' ')
except IOError as error:
    print(error.errno, end=' ')
    print(2, end=' ')
else:
    f.close()
    print(3, end=' ')
```

A. 2 3
B. 1 3
C. 1 2
D. 1 2 3

Explanation

Explanation/Reference:

QUESTION 402
What is the expected output of the following code?

```
def foo(x,y,z):
    return x(y) - x(z)

print(foo(lambda x: x % 2, 2, 1))
```

A. 1
B. -1
C. an exception is raised
D. 0

Explanation

Explanation/Reference:

QUESTION 403
Assuming that the math module has been successfully imported, which of the following expressions evaluate to True? (Select two answers)

A. math.hypot(2,5) == math.trunc(2.5)
B. math.floor(2.5) == math.trunc(2.5)
C. math.ceil(2.5) == math.floor(2.5)
D. math.hypot(3,4) == math.sqrt(25)

Explanation

Explanation/Reference:

QUESTION 404
Which of the following statements are true? (Select two answers)

A. ASCII is the name of a character coding standard
B. an escape sequence can be recognized by the # sign put in front of it.
C. UTF-8 is one of the ways of representing UNICODE code points.
D. a code point is a point inside the code when execution stops immediately

Explanation

Explanation/Reference:

QUESTION 405
Which of the following statement are true? (Select two answers)

A. if open( )'s second argument is 'w' and the invocation succeeds, the previous file's content is lost
B. closing an open file is performed by the closefile( ) function
C. if open( )'s second argument is 'r' the file must exist or open will fail
D. the second open( ) argument describes the open mode and defaults to 'w'

Explanation

Explanation/Reference:

QUESTION 406
What is true about Python packages? (Select two answers)

A. a code designed to initialize a package's state should be placed inside a file named init.py
B. a package contents can be stored and distributed as an mp3 file
C. _pycache_is a folder that stores semi-completed Python modules
D. the sys.path variable is a list of strings

Explanation

Explanation/Reference:

QUESTION 407
What is the expected behavior of the following code?

```
class Class:
    _Var = 1
    __Var = 2
    def __init__(self):
        self._prop = 3
        self __prop = 4

o = Class()
print(o._Class__Var + o._Class__prop)
```

A. it raises an exception
B. it outputs 1
C. it outputs 3
D. it outputs 6

Explanation

Explanation/Reference:

QUESTION 408
Which of the following lines of code will work flawlessly when put independently inside the dup() method in order to make the snippet's output equal to [0, 1, 1] ? (Select two answers)

```
class MyClass:
    def __init__(self, initial):
        self.store = initial

    def put(self, new):
        self.store.append(new)

    def get(self):
        return self.store

    def dup(self):
        # Insert the line of code here


Object = MyClass([0])
Object.put(1)
Object.dup()
print(Object.get())
```

A. put(self.store[1])
B. self.put(self.store[1])
C. self.put(self.get()[-1])
D. self.put(store[1])

QUESTION 409
What is the expected output of the following code if there is no file named non_existing_file inside the working directory?

```
try:
    f = open('non_existing_file', 'r')
    print(1, end=' ')
except IOError as error:
    print(error.errno, end=' ')
    print(2, end=' ')
else:
    f.close()
    print(3, end=' ')
```

A. 2 2
B. 1 3
C. 1 2 3
D. 2 2 3

[redacted]

QUESTION 410
Which of the following lambda function definitions are correct? (Select two answers)

A. lambda x: None
B. lambda: 3.1415
C. lambda x: def fun(): return x
D. lambda lambda: lambda * lambda

[redacted]

QUESTION 411
What is true about Python class constructors? (Select two answers)

A. the constructor's first parameter identifies an object currently being created
B. the constructor cannot use the default values of the parameters
C. the constructor can be invoked directly under strictly defined circumstances
D. super-class constructor is invoked implicitly during constructor execution

[redacted]

QUESTION 412
What is the expected behavior of the following code?

```
class Class:
    Variable = 0
    def __init__(self):
        self.value = 0

object_1 = Class()
object_1.Variable += 1
object_2 = Class()
object_2.value += 1
print(object_2.Variable + object_1.value)
```

A. it outputs 1
B. it outputs 0
C. it raises an exception
D. it outputs 2

[redacted]

QUESTION 413
What is true about Python packages? (Select two answers)

A. the __name___variable content determines the way in which the module was run
B. a package can be stored as a tree of sub-directories/sub-folders
C. __pycache___is the name of a built-in variable
D. hashbang is the name of a built-in Python function

Section: (none)

QUESTION 414
What is true about Object-Oriented Programming in Python? (Select two answers)

A. encapsulation allows you to protect some data from uncontrolled access
B. the arrows on a class diagram are always directed from a superclass towards its subclass
C. inheritance is the relation between a superclass and a subclass
D. an object is a recipe for a class

QUESTION 415
What is the expected behavior of the following code?

```
the_string = ',,'.join(('alpha', 'omega'))
the_list = the_string.split(',')
print(',' in the_list)
```

A. It outputs False
B. It outputs nothing
C. It outputs True
D. It raises an exception

QUESTION 416
Assuming that the following code has been executed successfully, select the expressions which evaluate to True (Select two answers)

```
var = 1

def f():
    global var
    var += 1
    def g():
        return var
    return g

a = f()
b = f()
```

A. a is b
B. b() > 2
C. a() == 2
D. a is not None

QUESTION 417
What is the expected output of the following code?

```
myli = range(-2,2)
m = list(filter(lambda x: True if abs(x) < 1 else False, myli))
print(len(m))
```

A. 4
B. 16
C. an exception is raised
D. 1

[redacted]

Explanation/Reference:

QUESTION 418
Which of the following expressions evaluate to True? (Select two answers)

A. 't'.upper() in 'Thames'
B. 'in not' in 'not'
C. 'not' not in 'in'
D. 'a' not in 'ABC'.lower()

[redacted]

QUESTION 419
Assuming that the following piece of code has been executed successfully, which of the expressions evaluate to True? (Select two answers)

```
class A:
   __VarA = 1
   def get(self):
      return self.__VarA

class B(A):
   __VarA = 2
   def get(self):
      return self.__VarA

class C(B):
   __VarA = 3

obj_a = A()
obj_b = B()
obj_c = C()
```

A. isinstance(obj_b, C)
B. C._C ___arA == 2
C. hasattr(B, 'get')
D. obj_c.get() == 2

[redacted]

QUESTION 420
Assuming that the following piece of code has been executed successfully, which of the expressions evaluate to True? (Select two answers)

```
class A:
    VarA = 1
    def __init__(self):
        self.prop_a = 1

class B(A):
    VarA = 2
    def __init__(self):
        self.prop_a = 2
        self.prop_aa = 2

class C(B):
    VarA = 3
    def __init__(self):
        super().__init__()

obj_a = A()
obj_b = B()
obj_c = C()
```

A. obj_b.prop_a == 3
B. hasattr(obj_b, 'prop_aa')
C. isinstance(obj_c, A)
D. B.VarA == 3

[redacted]

QUESTION 421
What is the expected output of the following code?

```
    def foo(x):
        return -x if x > 0 else x

    print(foo(-2))
```

A. The code is erroneus and it will not execute
B. it outputs 2.0
C. it outputs -2
D. it outputs 0.0

[redacted]

QUESTION 422
Assuming that the following inheritance set is in force, which of the following classes is declared properly?

```
class A:
    pass

class B(A):
    pass

class C(A):
    pass
```

A. class Class_4(A,B): pass
B. class Class_1(C,B): pass
C. class Class_2(B,C): pass
D. class Class_3(A,C): pass

[redacted]

QUESTION 423
What is the expected behavior of the following code?

```
my_tuple = (1, 2, 3)

try:
    my_tuple[3] = my_tuple[2]
except IndexError as error:
    x = error
except Exception as exception:
    x = exception
else:
    x = None

print(x)
```

A. it outputs list assignment index out of range
B. it outputs tuple object does not support item assignment
C. the code is erroneous and it will not execute
D. it outputs None

[redacted]

QUESTION 424
What is the expected output of the following code if the file named existing_text_file is located inside the working directory?

```
try:
    f = open('existing_text_file', 'rt')
    d = f.readline()
    print(len(d))
    f.close()
except IOError:
    print(-1)
```

A. the length of the first line from the file
B. -1
C. the number of lines contained inside the file
D. the length of the last line from the file

[redacted]

QUESTION 425
What is the expected output of the following code?

```
import sys
import math

b1 = type(dir(math)[0]) is list
b2 = type(dir(sys.path)[-1]) is list
print(b1 and b2)
```

A. False
B. None
C. True
D. 0

[redacted]

Explanation:
Wie (330)

QUESTION 426
A Python package called pypack includes a module named pymod.py which contains a function named pyfun().
Which of the following snippets will let you invoke the function? (Choose two.)

A.
```
from pypack.pymod import pyfun
pyfun()
```
B.
```
import pypack
pymod.pyfun()
```
C.
```
from pypack import *
pyfun()
```
D.
```
import pypack
import pypack.pymod
pypack.pymod.pyfun()
```

[redacted]

Explanation:
Wie (332)

QUESTION 427
Assuming that the code below has been placed inside a file named code.py and executed successfully, which of the following expressions evaluate to True?(Choose two.)

```
class ClassA:
        var = 1
        def __init__(self, prop):
                prop1 = prop2 = prop


class ClassB(ClassA):
        def __init__ (self, prop):
                prop3 = prop ** 2
                super().__init__(prop)
        def __str__(self):
                return 'Object'

Object = ClassA(2)
```

A. ClassA.__module__== '__main__'
B. len(ClassB.__bases__) == 2
C. __name__ == '__main__'
D. str(Object) == 'Object'

[redacted]

Explanation: Wie (350)

```
print(ClassA.__module__== '__main__')
#print(str(Object) == 'Object')
#print(len(ClassB.__bases__) == 2)
print(__name__ == '__main__')
```

QUESTION 428
What is the expected behavior of the following code?

```
class Class:
        Variable = 0
        def __init__ (self):
                self.value = 0

object_1 = Class()
Class.Variable += 1
object_2 = Class()
object_2.value += 1
print(object_2.Variable + object_1.value)
```

A. it raises an exception
B. it outputs 2
C. it outputs 1
D. it outputs 0

[redacted]

Explanation: Wie (352)

QUESTION 429
Assuming that the code below has been executed successfully, which of the expressions evaluate to True? (Choose two.)

```
class Class:
        data = 1
        def __init__ (self, value):
                self.prop = self.var = value

Object = Class(2)
#print('var' in Class.__dict__)
print(len(Object.__dict__ ) == 2)
#print('data' in Object.__dict__)
print('var' in Object.__dict__)
```

A. 'var' in Class.__dict__
B. len(Object.__dict__) == 2
C. 'data' in Object.__dict__
D. 'var' in Object.__dict__

[redacted]

Explanation:
Wie (356)

QUESTION 430
What is the expected output of the following snippet?

```
class Upper:
        def method (self):
                return 'upper'

class Lower(Upper):
        def method (self):
                return 'lower'

Object = Lower()

print(isinstance(Object, Upper), end=' ')

print(Object.method())
```

A. False lower
B. True upper
C. True lower
D. False upper

[redacted]

Explanation:
Wie (393)

QUESTION 431
What is the expected behavior of the following code?

```
d = {'1': '1', '2': '2'}
try:
        d['1'] = d['3']
except BaseException as error:
        print(type(error))
```

A. it outputs <class 'KeyError'>
B. it outputs <class 'BaseException'>
C. the code is erroneous and it will not execute
D. it outputs <class 'Exception'>

[redacted]

QUESTION 432
Assuming that the following code has been executed successfully, select the expressions which evaluate to True (Select two answers)

```
def f(x):
        def g(x):
                return x * x
        return g

a = f(2)
b = f(3)
```

A. b(1) == 4
B. a is not None
C. a(2) == 4
D. a == b

[redacted]

Explanation:
print(a is not None)
print(a(2)==4)

QUESTION 433
What is the expected output of the following code?

```
myli = [1, 2, 4]
m = list(map(lambda x: 2**x, myli))
print(m[-1])
```

A. an exception is raised
B. 16
C. 1
D. 4

[redacted]

QUESTION 434
Assuming that the following inheritance set is in force, which of the following classes is declared properly?

```
class A:
        pass
class B(A):
        pass
class C(A):
        pass
class D(B,C):
        pass
```

A. class Class_1(D): pass
B. class Class_3(A,C): pass
C. class Class_4(C,B): pass
D. class Class_2(A,B): pass

[redacted]

Explanation:
class Class_1(D): pass
#class Class_3(A,C): pass
class Class_4(C,B): pass
#class Class_2(A,B): pass

QUESTION 435
What is the expected output of the following code?

```
import sys
import math

b1 = type(dir(math)[0]) is list
b2 = type(dir(sys.path)[-1]) is list
print(b1 and b2)
```

A. False
B. None
C. True
D. 0

[redacted]

QUESTION 436
A Python package called pypack includes a module named pymod.py which contains a function named pyfun(). Which of the following snippets will let you invoke the function? (Choose two.)

A.
```
from pypack.pymod import pyfun
pyfun()
```
B.
```
import pypack
pymod.pyfun()
```
C.
```
from pypack import *
pyfun()
```
D.
```
import pypack
import pypack.pymod
pypack.pymod.pyfun()
```

[redacted]

QUESTION 437
Assuming that the code below has been placed inside a file named code.py and executed successfully, which of the following expressions evaluate to True?(Choose two.)

```
class ClassA:
    var = 1
    def __init__(self, prop):
        prop1 = prop2 = prop


class ClassB(ClassA):
    def __init__ (self, prop):
        prop3 = prop ** 2
        super().__init__(prop)
    def __str__(self):
        return 'Object'

Object = ClassA(2)
```

A. ClassA.__module__== '__main__'
B. len(ClassB.__bases__) == 2
C. __name__ == '__main__'
D. str(Object) == 'Object'

[redacted]

Explanation:
```
print(ClassA.__module__== '__main__')
#print(str(Object) == 'Object')
#print(len(ClassB.__bases__) == 2)
print(__name__ == '__main__')
```

QUESTION 438
What is the expected behavior of the following code?

```
class Class:
        Variable = 0
        def __init__ (self):
                self.value = 0

object_1 = Class()
Class.Variable += 1
object_2 = Class()
object_2.value += 1
print(object_2.Variable + object_1.value)
```

A. it raises an exception
B. it outputs 2
C. it outputs 1
D. it outputs 0

[redacted]

QUESTION 439
Assuming that the code below has been executed successfully, which of the expressions evaluate to True? (Choose two.)

```
class Class:
        data = 1
        def __init__ (self, value):
                self.prop = self.var = value

Object = Class(2)
#print('var' in Class.__dict__)
print(len(Object.__dict__ ) == 2)
#print('data' in Object.__dict__)
print('var' in Object.__dict__)
```

A. 'var' in Class.__dict__
B. len(Object.__dict__) == 2
C. 'data' in Object.__dict__
D. 'var' in Object.__dict__

[redacted]

QUESTION 440
What is the expected output of the following snippet?

```
class Upper:
        def method (self):
                return 'upper'

class Lower(Upper):
        def method (self):
                return 'lower'

Object = Lower()

print(isinstance(Object, Upper), end=' ')

print(Object.method())
```

A. False lower
B. True upper
C. True lower
D. False upper

[redacted]

QUESTION 441
The __bases__ property in Python contains:

A. base class ids (int)
B. base class locations (addr)
C. base class names (str)
D. base class objects (class)

[redacted]

QUESTION 442
What is the expected behavior of the following code?

```
class Super:
    def make(self):
        return 0

    def doit(self):
        return self.make()

class Sub_A(Super):
    def make(self):
        return 1

class Sub_B(Super):
    def make(self):
        return 2

a = Sub_A()
b = Sub_B()
print(a.doit() + b.doit())
```

A. it outputs 1
B. it outputs 2
C. it outputs 3
D. it outputs 0

[redacted]

QUESTION 443
Assuming that the code below has been placed inside a file named code.py and executed successfully, which a expressions evaluate to True? (Select two answers

```
class ClassA:
    var = 1

    def __init__(self, prop):
        self.prop1 = self.prop2 = prop

    def __str__(self):
        return 'Object'

class ClassB(ClassA):
    def __init__(self, prop):
        self.prop3 = prop ** 2
        super().__init__(prop)
object_instance = ClassB(2)
```

A. ClassA.__module__ == '__main__'
B. len(ClassB.__bases__) == 2
C. __name__ == 'code.py'
D. str(object_instance) == 'Object'

[redacted]

QUESTION 444

What is the expected behavior of the following code?

```
my_list = [matrix for matrix in range(5, 0, -1)]
m = [my_list[i] for i in range(5) if my_list[i] % 2 == 0]
print(m)
```

A. the code is erroneos and it will not execute
B. it outputs [0, 1, 2, 3, 4]
C. it outputs [2, 4]
D. it outputs [4, 2]

[redacted]

QUESTION 445

What is true about lambda functions? (Select two answers)

A. they must have a non-zero number of parameters
B. they are called anonymous functions
C. they must contain the return keyword
D. they cannot return the None value as a result

[redacted]