To set the size of a tkinter window, which function do we use?

size

window_size

geometry

set_size

Question 2

In a script, to start the tkinter loop, we must call which method?

start

start_loop

mainloop

loop

Question 3

Which of the following are geometry managements in Tkinter?

Grid

Absolute

Pack

Place

Question 4

We can get the location of a function by using its name without parenthesis.

True

False

Question 5

GUI stands for

Graphics, Usability, Interactions

Great Unified Information

Graphical User Interface

Graph Under Influence

Question 6

(Select all that apply) Which of the following are widgets that can take in text from a user?

Entry

Text

Check Buttons

Label

Frame

Button

Question 7

Check button widgets

allow for users to create a list of choices to be made

allow for users to select options from a drop down menu

allow for multiple choice selections out of set possible selections to be made

allow for only one choice to be selected out of a set of possible choices to be made

Question 8

Each individual Frame can have its own Geometry manager

True

False

Question 9

If a button calls a function that requires arguments, we could use what to call the function?

just call the named function. It will know which arguments we would like to pass to it.

simply call the named function passing the argument to it.

use the attribute function_vars and pass a tuple of the arguments needed for the function.

Lambda function that calls the function with appropriate arguments.

Question 10

The .pyw extension for a script file can be combined with what command to run a GUI application from the command line without invoking the console?

python-windowed

python --windowed

pythonw

pywindow

Question 11

Which attribute do you set to invoke an action when a button is pressed?

pressed

command

action

callback

Question 12

What class is used to create a main window using tkinter?**Tk**

Question 13

(Select all that apply)

Using the grid geometry manager we use **_row_____** and **__column_____** to place widgets in the frame.

row

x

y

No answer text provided.

column

No answer text provided.

Question 14

(Select all that apply)

Using the place geometry manager we use _____ and _____ to place widgets in the frame.

row

column

x

y

Question 15

The Pack geometry manager places widgets in a frame using values that represent the row and column for placement.

True

False

Question 16

A label

is used to receive a single line of text.

is used to receive multiple lines of text.

is used to display multiple lines of text.

is used to display a single line of text.

Question 17

A button

is used to send a specific option to the business logic of the application.

is used to give the user options to select from.

is used to display a single line of text.

is used to perform some action when pressed.

Question 18

Combo boxes

only displays multiline text.

has a radial button to allow for multiple default selections.

has a check box to indicate a selection.

allows for dropdown box for a selection of items.

Question 19

(Select all that apply)

Which of the following are valid Variable Objects

IntVar

StringVar

DoubleVar

ListVar

DictionaryVar

BooleanVar

Question 20

To set an event on a widget, which attribute do we set?

event

set_event

Bind_event

bind

_____

Question 1

What Python module support comma separated variables?

xml

csv

json

flatfile

Question 2

What built-in function can be used to receive the next item from a CSV iterator?

next()

retrieve()

iter_to()

next_row()

Question 3

When reading from a CSV file, the file must have the .csv extension.

True

False

Question 4

What result is returned by the CSV Reader when it encounters a missing column?

Empty String

False

None

An error is thrown

Question 5

To make a class JSON serializable we need to extend the json._____
class

JSONEncoder

Question 6

To make the JSON output of the dump call more human-readable we can pass the
named argument **indent** an integer to space the items out.

True

  False

Question 7

The second argument to the dump method of a json object is a

file object to write to

string object which contains the file name to write to

string object which contains the file name to read from

file object to read from

Question 8

Which of the following will allow use to immediately write to a JSON file?

fileout()

dumps()

dump()

json_out()

Question 9

Which function do we use to load a JSON file?

open()

read()

load()

loads()

Question 10

Which SQL keyword do we use to retrieve information from a database?

FIND

GRAB

PULL

SELECT

Question 11

How do we delete a table from an SQL database?

DROP database

DELETE database

DROP table

DELETE table

Question 12

Suppose we have the following table. Which of the following would display only the player names that have a score less than 100?

player_name	score
btcr	150
jls	125
tms	95
acs	175

nar	90

Table: scores

SELECT score FROM scores WHERE score < 100;

SELECT * FROM scores WHERE score > 100;

SELECT player_name FROM score

SELECT player_name FROM scores WHERE score < 100;

Question 13

What is the command to make tables using SQL

CREATE

SETUP

MAKE

DEFINE

Question 14

The fetchall method for an sqlite cursor object returns

a list of tuples

a list of dictionaires

a list of lists

a single result

Question 15

Used inside the find or findall method, what string would we pass in to find tags named **course**?

'course'

'.//course'

'.course'

'\\course'

Question 16

In order to create a child of an element in an XML document, we use which class?

Element

Child

SubElement

ChildElement

Question 17

(Select all that apply)

Which of the following may we import to create our XML hierarchies?

XMLTag

SubElement

Comment

Element

Question 18

What is the vulnerability in XML that results in an exponential entity expansion taking up CPU time and gigs of memory?

Quadratic Blowup Entity Expansion

External Entity Expansion

Billion Laughs attack

Decompression Bomb

Question 19

In order to create the root element of an XML document, we use which class?

SubElement

Root

Element

RootElement

Question 20

Which of the following data persistence formats has potential security issues?

JSON

SQL

CSV

XML

Question 1

The commands passed to the os.system function can be ran on any operating system.

True

False

Question 2

If we want the current directory, what symbol is passed to the operating system to retrieve it?

Two periods

A back slash

A forward slash

A single period

Question 3

If we want the previous directory, what do we pass to the operating system to retrieve it?

A single period

Two periods

A forward slash

A back slash

Question 4

Linux has a command called **find** which can be used to search a directory for folders and files. How would we call this command using Python's **os.system** function?

```
os.system <- find
```

```
os.system.find
```

```
os.system("find")
```

```
os.system(find)
```

Question 5

Checking if a filepath is a file, which function would I use?

```
os.path.isdir(basepath)
```

```
os.is_directory(basepath)
```

`os.path.isfile(basepath)`

```
os.is_file(basepath)
```

Question 6 Using sys.argv to accept command line arguments and given the following Python script call, what is the first item in the argv list?

```
python klog.py out.txt -t 30m
```

-t

30m

klog.py

out.txt

Question 7

What type of object is created when parse_args() method is called?

ArgumentParser

Parser

Namespace

System

Question 8

Give the pip command to install the package graphviz

pip install graphviz

Question 9

When using an ArgumentParser object, how do we add an argument with switch **-a** that accepts only integer types?

add_argument("-a", type=int)

  add_args("a", int)

  addArgument("-a", type=int)

  add_argument("a", int)

Question 10

The os.walk function allows us to traverse down a directory visiting all subfolders and files.

True

False

Question 11

Which of the following is the correct sequence to match the pattern "ABCDEFGHIJKLMNOPQRSTUVWXYZ" using the glob module?

A, Z

[A-Z]

A->Z

[a-z]

Question 12

Which of the following are OS independent ways to join file paths with a correct separator? Assume **files** is a list of strings containing the path strings.

os.path.join(*files)

'\\'.join(files)

os.sep.join(files)

'/'.join(files)

Question 13 Given the following code, which of the following are valid calls to the program?

```python
from argparse import ArgumentParser


parser = ArgumentParser()


parser.add_argument('a')


parser.add_argument('-b', '--build')


#nargs says you must pass in this many arguments


#to this switch


parser.add_argument('-c', nargs=2)
```

```
args = parser.parse_args()
```

python prog.py -b test

python prog.py test

python prog.py -c 1 2 3

python prog.py -b test test

Question 14

Which of the following is a type of argument to our program that dictates how our program behaves?

long name

short name

absolute path

switch

Question 15

Which of the following is a switch that is a single letter preceded by a single hyphen

short name

 argument

 long name

 relative path

Question 16

Suppose we are within the directory with path

`/home/broge2/python/projects/quiz4`

If we do ../../ we are demonstrating

short name

long name

relative pathing

absolute pathing

Question 17

Which function of the time module will give us a date and time?

time

clock

ctime

gmtime

Question 18

Which of the following is a wildcard that matches 0 or more of any character for the glob module?

. (Period)

! (Exclamation Point)

* (asterisk)

? (Question Mark)

Question 19

Which of the following is a wildcard to match just a single character for the glob module?

. (Period)

? (Question Mark)

! (Exclamation Point)

* (asterisk)

Question 20

If we wanted to detect what operating system the program is being ran on we can use

sys.operating_system

os.name

sys.name

os.os

—--

Which of the following are true docstrings?

They can be assigned to variables.

They only allow single line comments.

Docstrings are parsed by the help function. **They allow multiline strings without escape characters.**

Question 2

To make an inline comment we use what symbol?

--

;

#

//

Which of the following examples of unpacking are valid?

a, b, *c = [1, 2]

a, b, c = [1, 2, 3]

a, b, c = [1, 2]

foo(*[1, 2, 3]) #foo is a function

Question 4

(Select all that apply) Which of the following are comparison operators

>=

And

==

or

is

Question 5

Which of the following is used to exit a loop and continue with the rest of the program?

exit

break

continue

else

Question 6

What is the result of the following?

```
False - 2 + True
```

  Error

  False

-1

  True

Question 7

Suppose we wanted to make a range object with values between -50 and 100 skipping every 7 items. How would we do that?

range(100, 7)

range(-50, 100)

range(-50, 100, 7)

range(-50:100:7)

Question 8

(Select all that apply)

Which of the following will evaluate to True?

not ""

[]

{1, 2, 3, 4}

not None

Question 9

(Select all that apply) Which of the following will evaluate to False?

Empty strings

None

False

Empty lists

Question 10

What is the result of the following?


```
True or not False
```


True

False

Question 11

What is the result of the following?

```python
a = 4

if a >= 10:
    print("Greater than 10")
elif a >= 7:
    print("Greater than 7")
elif a >= 4:
    print("Greater than 4")
elif a >= 1:

    print("Greater than 1")
```

Greater than 4

Greater than 7

Greater than 10

Greater than 7

Greater than 2

Question 12

In order to create an else-if statement (an else with a condition) you use the
_____ keyword.

elif

Question 13

What is the result of the following?

```
[[i for i in range(1, j+1)] for j in range(1, 5)]
```

[1, 2, 3, 4]

[[1], [1, 2], [1, 2, 3], [1, 2, 3, 4]]

[[1, 2, 3, 4], [1, 2, 3, 4], [1, 2, 3, 4], [1, 2, 3, 4]]

Error

Question 14

Which of the following is true about the for loop?

A for loop uses a conditional to determine when to keep going or when to stop.

For loops use an incrementor to determine how many times the loop should continue.

For loops iterate over sequences or iterables such as lists, strings, sets, tuples, and others.

The else clause of a for loop occurs when it exits abruptly.

Question 15

Which of the following is true about the while loop?

The else clause of a while loop will execute when the loop exits normally (not breaking).

A while loop iterates over a sequence or iterable such as a list, string, tuple, or others.

A while loop uses an incrementor to determine the number of times the loop should occur.

The else clause of a while loop occurs when the loop exits after a break statement is reached.

Question 16

Generators are created by using what keyword?

gen

yield

generator

return

Question 17

What is the result of the following?

```python
def times_two(x):
    return x * 2

def map(function, seq):
    return [function(n) for n in seq]

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

```
map(times_two, l)
```

4

[2, 4, 6]

Error

[times_two, times_two, times_two]

Question 18

Which of the following will create a function called foo with 3 parameters?

def function foo(a, b, c):

define foo(a, b, c)

foo(a, b, c)

def foo(a, b, c):

Question 19

What keyword is used to create as function?

define

func

function

def

Question 20

Which of the following will allow an arbitrary list of arguments to be passed to a function in the function header?

kwargs

*a

list

**a

Which of the following is used to skip the rest of the loop block and move to the next iteration of the loop?

break

continue

else

exit

Question 6

Comments are runnable snippets of code.

True

False

Question 8

(Select all that apply) Which of the following will evaluate to False?

Empty lists

Empty strings

False

None

Question 9

(Select all that apply) Which of the following will evaluate to True?

0

True

Non-empty lists

Empty dictionaries

Question 10

What is the result of the following?

```
a = 3
b = 7
c = 5

a < b > c
```

True

False

Question 11

What is the result of the following?

```python
a = 4

if a >= 10:
    print("Greater than 10")
elif a >= 7:
    print("Greater than 7")
elif a >= 4:
    print("Greater than 4")
elif a >= 1:

    print("Greater than 1")
```

Greater than 7

Greater than 4

Greater than 2

Greater than 10

Greater than 7

Greater than 4

Question 12

For what values will make the following print "Critical"?

```python
print("Critical" if d >= 19 else "Normal" if d >= 2 else "Miss"
```
When d is greater than or equal to 19.

When d is greater than or equal to 1.

When d is greater than or equal to 2.

Question 13

What is the result of the following?

```
[i for i in range(1, 50) if i % 3 == 0 and i % 5 == 0]
```

[3, 5, 6, 9, 10, 12, 18, 20, 21, 24, 25, 27, 33, 35, 36, 39, 40, 42, 48]

[3, 5, 6, 9, 10, 12, 15, 18, 20, 21, 24, 25, 27, 30, 33, 35, 36, 39, 40, 42, 45, 48]

Error

[15, 30, 45]

Question 14

Which of the following is true about the for loop?

For loops iterate over sequences or iterables such as lists, strings, sets, tuples, and others.

A for loop uses a conditional to determine when to keep going or when to stop.

The else clause of a for loop occurs when it exits abruptly.

For loops use an incrementor to determine how many times the loop should continue.

Question 15

What is true about the following while loop?

```
a = 10

while a > 0:
    print(a)
    a += 1
```

The while loop won't execute since the condition will be false.

This is an infinite loop and will not stop execution.

The numbers 10 to 20 will be printed.

It is missing parenthesis and will throw a syntax error.

Question 16

(Select all that apply) Which of the following is true about functions?

All functions are anonymous.

Functions can be passed to other functions.

Parameters can have a default value.

Keyword arguments must come before all other argument types.

Question 17

What keyword is used to create as function?

def

function

func

define

Question 18

Functions cannot be passed to other functions.

True

False

Question 19

Generators are created by using what keyword?

return

gen

generator

yield

Question 20

Which of the following will create a function called foo with 3 parameters?

define foo(a, b, c)

def function foo(a, b, c):

foo(a, b, c)

def foo(a, b, c):

━---

(Select all that apply)

Given the following code, which of the following statements is true?

```
class A:

    pass

class B(A):

    pass
```

Class B is a subclass of class A.

Class B is a super class of class A.

Class A is a subclass of class B.

Class A is a super class of class B.

Question 2

Functions are defined inside of classes and can only be accessed by an object of the class.

True

False

Question 3

(Select all that apply)

Of the given code, what is being demonstrated?

```
class A:

    pass



class B(A):

    pass
```

class variables

classes

overriding

inheritance

Question 4

Given the following code, what is the variable count considered?

```
class Agent:

    count = 0
```

```
    def __init__(self):

        count += 1
```

overridden variable

class variable

local method variable

instance variable

Question 5

The _____ keyword allows you to cause an exception/error to occur.

raise

Question 6

What do we put into the blank of the following code to make the class an exception?

class DaveCantDoThis(_____):

   pass

Exception

(Select all that apply)

Given the following code, which of the following statements is true?
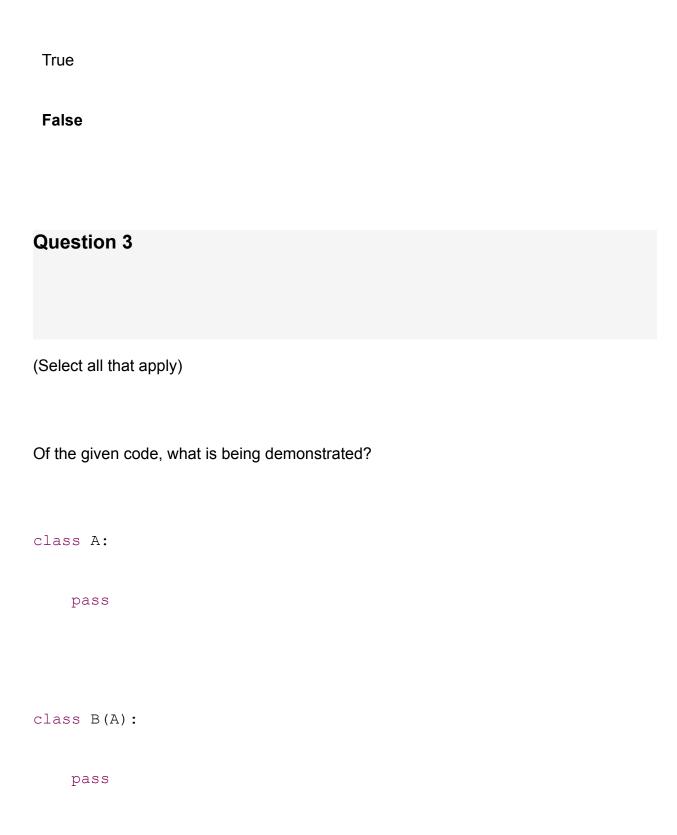
```
class A:

    pass



class B(A):

    pass
```

Class B is a subclass of class A.

Class B is a super class of class A.

Class A is a subclass of class B.

Class A is a super class of class B.

Question 2

Functions are defined inside of classes and can only be accessed by an object of the class.

True

False

Question 3

(Select all that apply)

Of the given code, what is being demonstrated?

```python
class A:

    pass


class B(A):

    pass
```

class variables

classes

overriding

inheritance

Question 4

Given the following code, what is the variable **count** considered?

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class Agent:

    count = 0


    def __init__(self):

        count += 1
```

overridden variable

class variable

local method variable

instance variable

Question 5

The _____ keyword allows you to cause an exception/error to occur.

raise

Question 6

What do we put into the blank of the following code to make the class an exception?

```
class DaveCantDoThis(_____):

    pass
```

Exception

Question 7

You should only use the general BaseException to catch all exceptions.

  True

False

Question 8

Python scripts are also called _____. (all lowercase)

modules

Question 10

Given the following code, enter the correct code that will initialize the instance variable accepted by __init__.

```
class A:

    def __init__(self, arg):

        _____ #initialize arg as an instance variable
```

A.arg = arg

self.arg = arg

super().arg = arg

arg = arg

Question 11

The _____.py file is used to tell the Python interpreter that this directory is a package.

__init__

Question 12

Given the following code, what will the result be?

```
class A:

    num = 100

    def __init__(self):

        self.num = 500



a = A

print(a.num)
```

100 (with margin: 0)

Question 13

Which of the following methods creates a proper constructor?

def __init__(self)

  def init(self)

  def construct(self)

  def __construct__(self)

Question 14

Which of the following methods will allow a class to overload the plus (+) operator for a given class?

__add__

__add_op__

__plus_op__

__plus__

Question 15

The keyword used to create an alias is _____. (This is used inside statements such as imports, except clauses, and with contexts)(Select all that apply)

Given the following code, which of the following statements is true?

```
class A:

    pass


class B(A):

    pass
```

Class B is a subclass of class A.

Class B is a super class of class A.

Class A is a subclass of class B.

Class A is a super class of class B.

Question 2

Functions are defined inside of classes and can only be accessed by an object of the class.

True

False

Question 3

(Select all that apply)

Of the given code, what is being demonstrated?

```python
class A:

    pass



class B(A):

    pass
```

 class variables

classes

 overriding

inheritance

Given the following code, what is the variable **count** considered?

```
class Agent:

    count = 0


    def __init__(self):

        count += 1
```

overridden variable

class variable

local method variable

instance variable

Question 5

The _____ keyword allows you to cause an exception/error to occur.

raise

Question 6

What do we put into the blank of the following code to make the class an exception?

```
class DaveCantDoThis(_____):

    pass
```

Exception

Question 7

You should only use the general BaseException to catch all exceptions.

True

False

Question 8

Python scripts are also called modules

Question 9

(Select all that apply)

Which of the following is equivalent to 3 - 2?

3.__sub__(2)

(3).__sub__(2)

t = 3

t.__sub__(2)

(2).__sub__(3)

Question 10

Given the following code, enter the correct code that will initialize the instance variable accepted by __init__.

```
class A:

    def __init__(self, arg):

                _____ #initialize arg as an instance variable
```

A.arg = arg

self.arg = arg

super().arg = arg

arg = arg

Question 11

The _____.py file is used to tell the Python interpreter that this directory is a package.

__init__

Question 12

Given the following code, what will the result be?

```python
class A:

    num = 100

    def __init__(self):

        self.num = 500



a = A

print(a.num)
```

100 (with margin: 0)

Question 13

Which of the following methods creates a proper constructor?

def __init__(self)

def init(self)

def construct(self)

def __construct__(self)

Question 14

Which of the following methods will allow a class to overload the plus (+) operator for a given class?

__add__

__add_op__

__plus_op__

__plus__

Question 15

The keyword used to create an alias is _____. (This is used inside statements such as imports, except clauses, and with contexts)

as

Question 16

The Python standard for the name of the instance variable inside class methods is _____. It is also the first variable that must be made in a class method.

self

Question 17

Which of the following will allow a class to overload the minus (-) operator for a given class?

__minus_op__

__sub_op__

__sub__

__minus__

Question 18

The first argument to any method of an object is the object itself.

True

False

Question 19

(Select all that apply)

Suppose we have the following hierarchy where package is a folder. Which of the following is a correct to import foo.py?

```
/package
```

```
        |
```

```
    ---__init__.py
```

```
      |
```

```
  ---foo.py
```

from package.__init__ import foo

from package import foo

from package import *

import package.foo

Question 20

(Select all that apply)

Which statements about the following code is true?

```
class A:

    def do_work(self):

        pass



class B:

    def do_stuff(self):
```

```
        pass




class C(A):

    pass




class D(B):

    pass




class E(D):

    pass
```

Instances of class E have a method called do_stuff.

Instances of class E and D are of type B.

Instances of class D have a method called do_stuff.

Instances of class C have a method called do_work.

Question 16

The Python standard for the name of the instance variable inside class methods is
_____. It is also the first variable that must be made in a class method.

self

Question 17

Which of the following will allow a class to overload the minus (-) operator for a given class?

__minus_op__

__sub_op__

__sub__

__minus__

Question 18

The first argument to any method of an object is the object itself.

True

  False

Question 19

Suppose we have the following hierarchy where package is a folder. Which of the following is a correct to import foo.py?

```
/package
```

```
       |
```

```
     ---__init__.py
```

```
       |
```

```
   ---foo.py
```

from package import foo

 from package import *

 import package.foo

Question 20

(Select all that apply)

Which statements about the following code is true?

```
class A:

    def do_work(self):

        pass
```

```python
class B:

    def do_stuff(self):

        pass




class C(A):

    pass




class D(B):

    pass




class E(D):

    pass
```

Instances of class E have a method called do_stuff.

Instances of class E and D are of type B.

Instances of class D have a method called do_stuff.

Instances of class C have a method called do_work.

Question 7

You should only use the general BaseException to catch all exceptions.

True

False

Question 8

Python scripts are also called _____. (all lowercase)

modules

Question 9

(Select all that apply)

Which of the following is equivalent to 3 - 2?

(3).__sub__(2)

t = 3

t.__sub__(2)

(2).__sub__(3)

Question 10

Given the following code, enter the correct code that will initialize the instance variable accepted by __init__.

class A:

  def __init__(self, arg):

    _____ #initialize arg as an instance variable

  A.arg = arg

  self.arg = arg

```
        super().arg = arg


        arg = arg
```

Question 11

The _____.py file is used to tell the Python interpreter that this directory is a package.

__init__

Question 12

Given the following code, what will the result be?

```
class A:


    num = 100


    def __init__(self):


        self.num = 500



a = A

print(a.num)
```

100

100 (with margin: 0)

Question 13

Which of the following methods creates a proper constructor?

def __init__(self)

def init(self)

def construct(self)

def __construct__(self)

Question 14

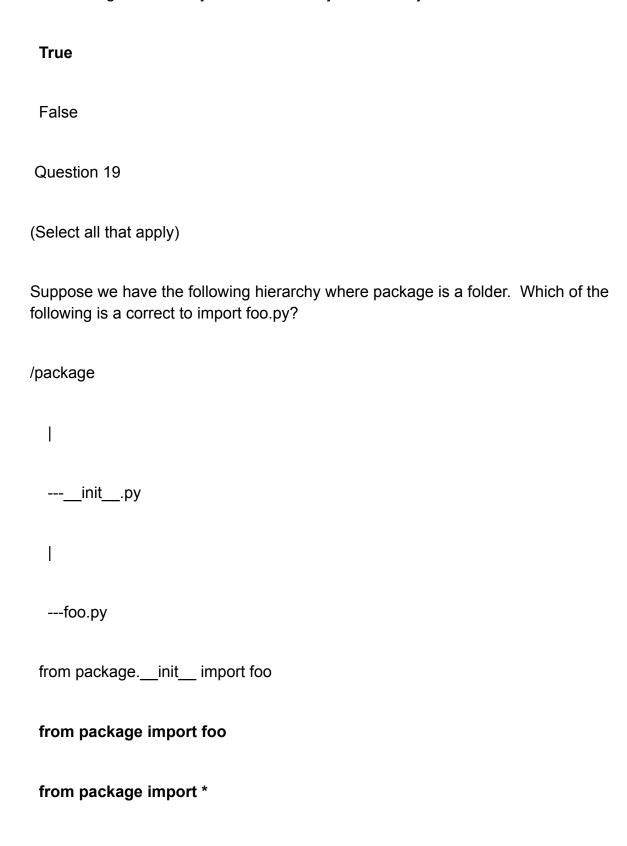Which of the following methods will allow a class to overload the plus (+) operator for a given class?

__add__

__add_op__

__plus_op__

__plus__

Question 15

The keyword used to create an alias is _____. (This is used inside statements such as imports, except clauses, and with contexts)

as

Question 16

The Python standard for the name of the instance variable inside class methods is _____. It is also the first variable that must be made in a class method.

self

Question 17

Which of the following will allow a class to overload the minus (-) operator for a given class?

  __minus_op__

  __sub_op__

  __sub__

  __minus__

Question 18

The first argument to any method of an object is the object itself.

True

False

Question 19

(Select all that apply)

Suppose we have the following hierarchy where package is a folder. Which of the following is a correct to import foo.py?

/package

   |

   ---__init__.py

   |

   ---foo.py

from package.__init__ import foo

from package import foo

from package import *

import package.foo

Question 20

(Select all that apply)

Which statements about the following code is true?

```python
class A:

    def do_work(self):

        pass




class B:

    def do_stuff(self):

        pass




class C(A):

    pass
```

```python
class D(B):

    pass



class E(D):

    pass
```

Instances of class E have a method called do_stuff.

Instances of class E and D are of type B.

Instances of class D have a method called do_stuff.

Instances of class C have a method called do_work.

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