Congratulations! You passed!

Grade received 88.88% **To pass** 66% or higher

Go to next item

Module 1 Graded Quiz

Latest Submission Grade 88.88%

1. What is the value of x after the following lines of code? **1 / 1 point**

```
x=2

x=x+2
```

- (●) 4
- ( ) 2

Correct
Correct: the value x=x+2 changes the value of x, if x is assigned to its self. It's helpful to replace the value of x with its current value in this case 2 or x=2+2.

2. What is the result of the following operation 1+3*2 ? **1 / 1 point**

- (●) 7
- ( ) 12
- ( ) 8

Correct
Correct, Python follows the standard mathematical conventions

3. What is the type of the following **"7.1"** **0 / 1 point**

- ( ) What is the type of the following **"7.1"**
- (●) float
- ( ) string

Incorrect
incorrect, there are quotation marks

4. What is the result of the following code segment: **int(False)** 1 / 1 point

- ○ 1
- ◉ 0
- ○ error

Correct
correct, when you cast a boolean **False** to an integer you get a 0

5. In Python, what is the result of the following operation: **'1'+'2'** ? 1 / 1 point

- ○ 3
- ○ '3'
- ◉ '12'

Correct
correct, the '+' applied to strings does not add strings but concatenates them

6. What is the result of the following: **'hello'.upper()** ? 1 / 1 point

- ◉ 'HELLO'
- ○ 'Hello'
- ○ 'hello'

Correct
correct, upper returns a copy of the string in which all case-based characters have been converted to uppercase.

7. What is the result of the following **: str(1)+str(1)** ? 1 / 1 point

- ◉ '11'
- ○ 2

Correct

6. What is the result of the following: **'hello'.upper()** ? **1 / 1 point**

- (•) 'HELLO'
- ( ) 'Hello'
- ( ) 'hello'

Correct
correct, upper returns a copy of the string in which all case-based characters have been converted to uppercase.

7. What is the result of the following **: str(1)+str(1)** ? **1 / 1 point**

- (•) '11'
- ( ) 2

Correct
correct, the integers are cast to a string, and the strings are concatenated

8. What is the result of the following: **"ABC".replace("AB", "ab")** ? **1 / 1 point**

- (•) 'abC'
- ( ) 'ABc'

Correct
correct, the method **replace** returns a copy of the string with all occurrences of the old substring

9. In Python 3, what is the type of the variable x after the following: **x=2/2** ? **1 / 1 point**

- (•) float
- ( ) int

Correct
correct, in Python 3, regular division always results in a float

Congratulations! You passed!

Grade received 80% **To pass** 70% or higher

Go to next item

Module 2 Graded Quiz

Latest Submission Grade 80%

1. Consider the tuple **A=((11,12),[21,22])**, that contains a tuple and list. What is the result of the following operation **A[1]** ? **1 / 1 point**

- ((11,12),[21,22])
- [21,22] ✓
- (11,12)

Correct
correct, the index 1 corresponds to the second element in the tuple, which contains another list.

2. Consider the tuple **A=((1),[2,3],[4])**, that contains a tuple and list. What is the result of the following operation **A[2][0]**? **1 / 1 point**

- 4 ✓
- [4]
- 1

Correct
correct, A[2] corresponds to the third nested list; we then access the only element of the list using the index 0 i.e. A[2][0].

3. The method append does the following: **1 / 1 point**

- adds one element to a list ✓
- merges two lists or insert multiple elements to a list

Correct
correct, append-only adds one element.

4. Consider the following list : **A=["hard rock",10,1.2]** **1 / 1 point**

4. Consider the following list : **A=["hard rock",10,1.2]** **1 / 1 point**

What will list **A** contain affter the following command is run: **del(A[1])** ?

- [ ] [10,1.2]
- [x] ["hard rock",1.2]
- [ ] ["hard rock",10]

Correct
correct , we will delete element 1

5. What is the syntax to clone the list **A** and assign the result to list **B** ? **1 / 1 point**

- [ ] **B=A**
- [x] **B=A[:]**

Correct
correct

6. What is the result of the following: **len(("disco",10,1.2, "hard rock",10))** ? **1 / 1 point**

- [x] 5
- [ ] 6
- [ ] 0

Correct
correct, there are 5 elements in the tuple so the function len returns 5

7. Consider the following dictionary: **0 / 1 point**

{ "The Bodyguard":"1992", "Saturday Night Fever":"1977"}

select the keys

- [x] "1992"

This should not be selected
incorrect this is a value

7. Consider the following dictionary: **0 / 1 point**

{ "The Bodyguard":"1992", "Saturday Night Fever":"1977"}

select the keys

- [x] "1992"

  This should not be selected
  incorrect this is a value

- [x] "1977"

  This should not be selected
  incorrect this is a value

- [ ] "Saturday Night Fever"
- [ ] "The Bodyguard"

8. The variable **release_year_dict** is a Python Dictionary, what is the result of applying the following method: **release_year_dict.values()** ? **0 / 1 point**

- (•) retrieve the keys of the dictionary
- ( ) retrieves, the values of the dictionary

  Incorrect
  incorrect, this method returns the values

9. Consider the Set: **V={'1','2'}**, what is the result of **V.add('3')**? **1 / 1 point**

- ( ) {1,2,3}
- (•) {'1','2','3'}
- ( ) {'1','2'}

  Correct
  correct

10. What is the result of the following: **'A' in {'A','B'}** ? **1 / 1 point**

incorrect this is a value

- [x] "1977"

This should not be selected
incorrect this is a value

- [ ] "Saturday Night Fever"
- [ ] "The Bodyguard"

8. The variable **release_year_dict** is a Python Dictionary, what is the result of applying the following method: **release_year_dict.values()** ? **0 / 1 point**

- (•) retrieve the keys of the dictionary
- ( ) retrieves, the values of the dictionary

Incorrect
incorrect, this method returns the values

9. Consider the Set: **V={'1','2'}**, what is the result of **V.add('3')**? **1 / 1 point**

- ( ) {1,2,3}
- (•) {'1','2','3'}
- ( ) {'1','2'}

Correct
correct

10. What is the result of the following: **'A' in {'A','B'}** ? **1 / 1 point**

- ( ) False
- (•) True

Correct
correct

Congratulations! You passed!

Grade received 80% **To pass** 70% or higher

Go to next item

Module 3 Graded Quiz

Latest Submission Grade 80%

1. What is the output of the following code? **1 / 1 point**

```
x="Go"

if(x=="Go"):

  print('Go ')

else:

  print('Stop')

print('Mike')
```

- (●) Go Mike
- ( ) Mike
- ( ) Stop Mike

Correct

2. What is the result of the following lines of code? **0 / 1 point**

```
x=1
x>5
```

- (●) True
- ( ) False

Incorrect
incorrect, 1 is not larger than 5

3. What is the output of the following few lines of code? **1 / 1 point**

```
x=0
while(x<2):
```

```
x=0
while(x<2):
    print(x)
    x=x+1
```

- (●) 0
  1
- ( ) 0
  1
  2
- ( ) 0
  1
  3
  4

Correct
Correct

4. What is the result of running the following lines of code ? 1 / 1 point

```
class Points(object):
  def __init__(self,x,y):

    self.x=x
    self.y=y

  def print_point(self):

    print('x=',self.x,' y=',self.y)

p1=Points("A","B")
p1.print_point()
```

- ( ) x= A
- ( ) y= B
- (●) x= A y= B

Correct
correct

5. What is the output of the following few lines of code? 1 / 1 point

```
for i,x in enumerate(['A','B','C']):
    print(i+1,x)
```

- (●) 1 A
  2 B
  3 C
- ( ) 0 A
  1 B
  2 C
- ( ) 0 AA
  1 BB
  2 CC

Correct
Correct

6. What is the result of running the following lines of code ? 1 / 1 point

```
class Points(object):

  def __init__(self,x,y):

    self.x=x
    self.y=y

  def print_point(self):

    print('x=',self.x,' y=',self.y)

p2=Points(1,2)

p2.x='A'

p2.print_point()
```

- ( ) x= 1 y=2
- (●) x= A y=2

```
    print('x= ',self.x,' y= ',self.y)

p2=Points(1,2)

p2.x='A'

p2.print_point()
```

- x= 1 y=2
- x= A y=2
- x=A, y=B

Correct
correct

7. Consider the function step, when will the function return a value of 1? **1 / 1 point**

```
def step(x):
    if x>0:
        y=1
    else:
        y=0
    return y
```

- if x is larger than 0
- if x is equal to or less then zero
- if x is less than zero

Correct
correct, the value of y is 1 only if x is larger than 0

8. What is the output of the following lines of code? **1 / 1 point**

```
a=1

def do(x):
    a=100
    return(x+a)

print(do(1))
```

Congratulations! You passed!

Grade received 80% **To pass** 70% or higher

Go to next item

Module 4 Graded Quiz

Latest Submission Grade 80%

1. What is the result of the following lines of code? **1 / 1 point**

```
a=np.array([0,1])
b=np.array([1,0])
np.dot(a,b)
```

- (•) 0
- ( ) 1
- ( ) array([1,1])

Correct
correct

2. How do you perform matrix multiplication on the numpy arrays **A** and **B**? **1 / 1 point**

- ( ) A+B
- (•) np.dot(A,B)
- ( ) A*B

Correct
correct

3. What values does the variable **out** take if the following lines of code are run? **1 / 1 point**

```

X=np.array([[1,0,1],[2,2,2]])
out=X[0,1:3]
out

```

- array([1,0,1])
- array([2,2])
- array([0,1]) ✓

Correct
correct, the first index corresponds to the rows the second index corresponds to the columns

4. What is the value of **Z** after the following code is run? **1 / 1 point**

```
X=np.array([[1,0],[0,1]])
Y=np.array([[2,2],[2,2]])
Z=np.dot(X,Y)
```

- array([[2,2],[2,2]]) ✓
- array([[2,0],[0,2]])
- array([[3,2],[2,3]])

Correct
correct, the dot function corresponds to matrix multiplication

5. Consider the following text file: **Example1.txt:** **1 / 1 point**

This is line 1

This is line 2

This is line 3

What is the output of the following lines of code?

```
with open("Example1.txt","r") as file1:

    FileContent=file1.read()

    print(FileContent)
```

- This is line 1 ✓

  This is line 2

  This is line 3

6. What do the following lines of code do? 1 / 1 point

```
with open("Example1.txt","r") as file1:

  FileContent=file1.readlines()

  print(FileContent)

```

- (•) Read the file "Example1.txt"
- ( ) Write to the file "Example1.txt"
- ( ) Append the file "Example1.txt"

Correct
Correct, the mode is set to r for read.

7. What do the following lines of code do? 1 / 1 point

```
with open("Example.txt","w") as writefile:

  writefile.write("This is line A\n")
  writefile.write("This is line B\n")

```

- ( ) Read the file "Example.txt"
- (•) Write to the file "Example.txt"
- ( ) Append the file "Example.txt"

Correct
Correct.

8. What do the following lines of code do? 0 / 1 point

```
with open("Example3.txt","w") as file1:

file1.write("This is line C\n")

```

- ( ) Read the file "Example3.txt".

Correct.

8. What do the following lines of code do? **0 / 1 point**

```
with open("Example3.txt","w") as file1:

file1.write("This is line C\n")
```

- ○ Read the file "Example3.txt".
- ◉ Append the file "Example3.txt".
- ○ error

Incorrect
Incorrect.

9. Consider the dataframe **df**. How would you access the element in the 1st row 3rd column **1 / 1 point**

- ○ df.iloc[2,0]
- ○ df.iloc[1,3]
- ◉ df.iloc[0,2]

Correct
correct

10. In the lab, you learned you can also obtain a series from a dataframe **df**, select the correct way to assign the column with the header Length to a pandas series to the variable **x**. **0 / 1 point**

- ○ x=df['Length']
- ○ x=df[['Length']]
- ◉ x=df.[['Length']]

Incorrect
incorrect, this is not proper syntax

Congratulations! You passed!

Grade received 100% **To pass** 70% or higher

Go to next item

Module 5 Graded Quiz

Latest Submission Grade 100%

1. What are the 3 parts to a response message? **1 / 1 point**

- ○ Bookmarks, history, and security
- ◉ Start or status line, header, and body
- ○ Encoding, body, and cache
- ○ HTTP headers, blank line, and body

Correct

2. What is the purpose of this line of code "**table_row=table.find_all(name='tr')**" used in webscraping? **1 / 1 point**

- ○ It will find all of the data within the table marked with a tag "**p**"
- ◉ It will find all of the data within the table marked with a tag "**tr**"
- ○ It will find all of the data within the table marked with a tag "**a**"
- ○ It will find all of the data within the table marked with a tag "**h1**"

Correct

3. In what data structure do HTTP responses generally return? **1 / 1 point**

- ○ JSON
- ○ Nested Lists
- ◉ Lists
- ○ Tuples

Correct

- (●) Start or status line, header, and body
- ( ) Encoding, body, and cache
- ( ) HTTP headers, blank line, and body

Correct

2. What is the purpose of this line of code "**table_row=table.find_all(name='tr')**" used in webscraping? **1 / 1 point**

- ( ) It will find all of the data within the table marked with a tag "**p**"
- (●) It will find all of the data within the table marked with a tag "**tr**"
- ( ) It will find all of the data within the table marked with a tag "**a**"
- ( ) It will find all of the data within the table marked with a tag "**h1**"

Correct

3. In what data structure do HTTP responses generally return? **1 / 1 point**

- ( ) JSON
- ( ) Nested Lists
- (●) Lists
- ( ) Tuples

Correct

4. The Python library we used to plot the chart in the lab is **1 / 1 point**

- ( ) Plotly
- ( ) Pandas
- (●) MatPlotLib
- ( ) PyCoinGecko

Correct

Congratulations! You passed!

Grade received 84% **To pass** 75% or higher

Go to next item

Final Exam

Latest Submission Grade 84%

1. When slicing in Python what does the "0" in this statement [0:2] specify? **0 / 1 point**

- ○ It specifies the position to start the slice
- ◉ It specifies the step of the slicing
- ○ It specifies the position to end the slice

Incorrect

2. If **var** = "**01234567**" what Python statement would print out only the odd elements? **1 / 1 point**

- ○ print(var[2::2])
- ◉ print(var[1::2])
- ○ print(var[3::1])

Correct

3. Consider the string Name="EMILY", what statement would return the index of 3? **1 / 1 point**

- ○ **Name.find("Y")**
- ○ **Name.find("M")**
- ◉ **Name.find("L")**

Correct

4. What is the type of the following: **1.0** **1 / 1 point**

- ○ str
- ◉ float

4. What is the type of the following: **1.0** 1 / 1 point

- ○ str
- ◉ float
- ○ int

Correct

5. What is the result of the following code segment: float(3)? 1 / 1 point

- ○ 3
- ◉ 3.0
- ○ 3.5

Correct

6. What following code segment would produce an output of "0.5"? 1 / 1 point

- ○ 1//2
- ◉ 1/2

Correct

7. In Python 3, what is the type of the variable x after the following: **x=2/2** ? 1 / 1 point

- ◉ float
- ○ int

Correct

8. How many identical keys can a dictionary have ? 1 / 1 point

- ○ 3
- ○ 100000000

8. How many identical keys can a dictionary have ? **1 / 1 point**

- ○ 3
- ○ 100000000
- ◉ 0

Correct

9. What is the syntax to obtain the first element of the tuple? **1 / 1 point**

A=('a','b','c')

- ◉ A[0]
- ○ A[1]
- ○ A[:]

Correct

10. What line of code would produce this output: ['1','2','3','4']? **0 / 1 point**

- ◉ '1,2,3,4'.split(':')
- ○ '1,2,3,4'.join(',')
- ○ '1,2,3,4'.reverse(',')
- ○ '1,2,3,4'.split(',')

Incorrect

11. What is an important difference between lists and tuples? **1 / 1 point**

- ○ Lists and tuples are the same
- ○ Lists can't contain a string
- ○ Tuples can only have integers
- ◉ Lists are mutable tuples are not

12. What is a collection that is unordered, unindexed and does not allow duplicate members? **1 / 1 point**

- ○ Tuple
- ○ List
- ◉ Set

Correct

13. What value of x will produce the following output? **1 / 1 point**

How are you?

```
x=
if(x!=1):
 print('How are you?')
else:
 print('Hi')
```

- ◉ x=6
- ○ x="7"
- ○ x=1

Correct

14. What is an error that occurs during the execution of code? **1 / 1 point**

- ○ Exception handling
- ○ Finally
- ◉ Exception
- ○ Error messages

Correct

15. What add function would return '4' ? **1 / 1 point**

- ◉ def add(x): return(x+x) add(2)
- ○ def add(x): return(x+x) add('4')

16. What function returns a sorted list? **1 / 1 point**

- (●) sorted()
- ( ) lower()
- ( ) find()
- ( ) sort()

Correct

17. What segment of code would output the following? **1 / 1 point**

3

6

9

- ( ) A=['1','2','3'] for a in A: print(2*a)
- (●) A=[1,2,3] for a in A: print(3*a)
- ( ) A=[1,2,3] for a in A: print(2*a)

Correct

18. What code segment would output the following? **1 / 1 point**

2

- ( ) for i in range(1,5): if (i!=1): print(i)
- ( ) for i in range(1,5): if (i!=2): print(i)
- (●) for i in range(1,5): if (i==2): print(i)

Correct

19. What is the method defined in the class Rectangle used to draw the rectangle? **0 / 1 point**

class Rectangle(object): def __init__(self,width=2,height =3,color='r'): self.height=height self.width=width

Correct

19. What is the method defined in the class Rectangle used to draw the rectangle? **0 / 1 point**

class Rectangle(object): def __init__(self,width=2,height =3,color='r'): self.height=height self.width=width self.color=color def drawRectangle(self): import matplotlib.pyplot as plt plt.gca().add_patch(plt.Rectangle((0, 0),self.width, self.height ,fc=self.color)) plt.axis('scaled') plt.show()

- drawRectangle
- import matplotlib
- class Rectangle

Incorrect

20. What is the result of the following lines of code? **1 / 1 point**

a=np.array([0,1,0,1,0]) b=np.array([1,0,1,0,1]) a/b

- Division by zero error
- array([0.1, 1.0, 0.1, 1.0, 0.1])
- array([1, 1, 1, 1, 1])

Correct

21. What is the result of the following lines of code? **1 / 1 point**

a=np.array([1,1,1,1,1]) a+1

- array([11, 11, 11, 11, 11])
- array([1,1,1,1,1])
- array([2,2,2,2,2])

Correct

22. How would you select the columns with the headers: Artist, Length and Genre from the dataframe **df** and assign them to the variable **y** ? **1 / 1 point**

- y=df['Artist','Length','Genre']

22. How would you select the columns with the headers: Artist, Length and Genre from the dataframe **df** and assign them to the variable **y** ?

1 / 1 point

- ○ y=df['Artist','Length','Genre']
- ◉ y=df[['Artist','Length','Genre']]
- ○ y=df[['Artist'],['Length'],['Genre']]

Correct

23. Consider the file object: **File1**. How would you print the first two lines of text?

1 / 1 point

- ◉ for n in range(0,2): print(file1.readline())
- ○ file1.readline(4)

Correct

24. Which line of code is in the mode of append?

1 / 1 point

- ○ with open("Example.txt","w") as file1:
- ◉ with open("Example.txt","a") as file1:
- ○ with open("Example.txt","r") as file1:

Correct

25. What are the 3 parts to a URL?

0 / 1 point

- ○ Put, route, and get
- ○ Block, post, and route
- ○ Scheme, internet address, and route
- ◉ Get, post, and scheme

Incorrect