Your grade: 100%

Your latest: **100%** • Your highest: **100%** • To pass you need at least 70%. We keep your highest score.

Next item →

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

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

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

Correct
Correct! The given code creates two Numpy arrays, a and b, and then calculates their dot product using np.dot (a, b).

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

- ( ) A – B
- ( ) A*B
- (•) np.dot(A,B)
- ( ) A + B

Correct
Correct! The dot method is used to multiply the two arrays.

3. If you run the following lines of code, what values will the variable 'out' take? 1 / 1 point

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

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

Correct
Correct! The first index corresponds to the rows; the second index corresponds to the columns.

4. If you run the following lines of code, what values will the variable 'out' take? 1 / 1 point

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

- ( ) array([[1,0],[0,1]])
- ( ) array([[2,0],[0,2]])
- ( ) array([[3,2],[2,3]])
- (•) array([[2,2], [2,2]])

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:
    file_stuff=file1.readline()

print(file_stuff)
```

- ( ) Syntax error
- ( ) This is line 1

  This is line 2

  This is line 3
- ( ) This is line 1

  This is line 2
- (•) This is line 1

Correct
Correct! The open method helps to read a file.

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

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

print(FileContent)
```

- (•) Read the file "Example1.txt"
- ( ) Write to the file "Example1.txt"
- ( ) Append the file "Example1.txt"
- ( ) Convert the contents of the file to a binary format

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"
- ( ) Create a binary file "Example.txt"

Correct
Correct! The mode of the function is 'w' for write.

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

```
with open('Example2.txt','r') as readfile:
    with open('Example3.txt','w') as writefile:
        for line in readfile:
            writefile.write(line)
```

- ( ) Printing out the content of Example2.txt
- (•) Copying the text from Example2.txt to Example3.txt
- ( ) Checking the mode of the open function for each file object
- ( ) Reading the content of Example2.txt

Correct
Correct! This is the expected outcome.

9. Given the dataframe df, how can you retrieve the element in the first row and first column? 1 / 1 point

- ( ) df.iloc[2,1]
- ( ) df.iloc[1,2]
- (•) df.iloc[0,0]
- ( ) df.iloc[0,1]

Correct
Correct! Indexing begins at 0 in Python.

10. What function would you use to load a CSV file in Pandas? 1 / 1 point

- ( ) pd.load_csv(path)
- ( ) np.read_csv(path)
- ( ) pd.read_excel(path)
- (•) pd.read_csv(path)

Correct
Correct! The read method will read the CSV file in Pandas.