

Question 1

What is the result of the following lines of code?

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

0

1

array([1,1])

Correct

correct

Question 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

Question 3

What values does the variable out take if the following lines of code are run?

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

array([1,0])

array([1,2])

array([1,1])

Correct

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

Question 4

What is the value of Z after the following code is run?

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

```
array([[2,2],[2,2]])  
array([[2,0],[0,2] ])  
array([[3,2],[2,3]])
```

Correct

correct, the dot function corresponds to matrix multiplication

Question 5

Consider the following text file: Example1.txt:

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)
```

1 / 1 point

This is line 1

This is line 1

This is line 2

This is line 3

This is line 1

This is line 2

Correct

Correct

Question 6

What do the following lines of code do?

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

```
FileContent=file1.readlines()
```

```
print(FileContent)
```

1 / 1 point

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.

Question 7

What do the following lines of code do?

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

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

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

1 / 1 point

Write to the file "Example.txt"

Append the file "Example.txt"

Read the file "Example.txt"

Correct

Correct.

Question 8

What task do the following lines of code perform?

with open('Example2.txt','r') as readfile:

 with open('Example3.txt','w') as writefile:

 for line in readfile:

 writefile.write(line)

1 / 1 point

Copy the text from Example2.txt to Example3.txt.

Check the mode of the open function for each file object.

Print out the content of Example2.txt.

Correct

Correct.

Question 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

Question 10

What function would you use to load a csv file in Pandas? 1 / 1 point

pd.read_csv

pd.read_excel

Correct

correct