

✔ Congratulations! You passed!

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Grade received 100% Latest Submission Grade 100% To pass 70% or higher

1. What is the result of the following lines of code?

1 / 1 point

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

- ☐ array([0,2])
- ☐ 1
- ☒ 0

✔ 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

```
1
2 X=np.array([[1,0,1],[2,2,2]])
3 out=X[0:2,2]
4 out
5
```

- ☐ 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

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

1 / 1 point

```
1
2 X=np.array([[1,0],[0,1]])
3 Y=np.array([[2,2],[2,2]])
4 Z=np.dot(X,Y)
5
```

- ☒ 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

This is line 3

What is the output of the following lines of code?

```
1
2 with open("Exempl1.txt","r") as File1:
3
4     file_stuff=File1.readline ()
5
6     print(file_stuff)
```

☒ 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

6. Consider the following line of code:

1 / 1 point

```
1
2 with open(example1,"r") as file1:
3
```

What mode is the file object in?

☒ read

☐ write

☐ append

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

7. What do the following lines of code do?

1 / 1 point

```
1
2 with open("Example.txt","w") as writefile:
3
4     writefile.write("This is line A\n")
5     writefile.write("This is line B\n")
6
```

☐ 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?

1 / 1 point

```
1
2 with open("Example3.txt","w") as file1:
3
4     file1.write("This is line C\n")
5
```

☐ Read the file "Example3.txt".

☐ Append the file "Example3.txt".

☒ error

☒ Correct
Correct. There is no indent.

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. What method gets the unique elements of the following: `df['Length']` ?

1 / 1 point

- ☒ unique
- ☐ head

✓ Correct
correct