AWP Final Assessment

TE MARKS (/PACKAGE-COST-DETAILS/REGENERATE-MARKS?STUDENTID=21950&ASSESSMENTID=226612)

Score Obtained: 47/50 (94%)

RETAKE (/PACKAGE-COST-DETAILS/#) VIEW REPORT

NumPY stands for?

1/1 ATTEMPTED

- Numbering Python
- Number In Python
- Numerical Python
- None Of the above

2.
Numpy developed by?

1/1 ATTEMPTED

- Guido van Rossum
- Travis Oliphant
- Wes McKinney
- Jim Hugunin

3.
NumPy is often used along with packages like?

1/1 ATTEMPTED

- Node.js
- Matplotlib
- SciPy
- Both B and C

4.

The most important object defined in NumPy is an N-dimensional array type called? 1/1 ATTEMPTED

- ndarray
- narray
- nd_array
- darray

5. In a NumPy array, what term is used to describe the number of dimensions? 1/1 ATTEMPTED

- Axis
- Rank
- Shape
- Element

6. How do you access a specific element in a NumPy array? 1/1 ATTEMPTED

Using the locate() function

With the get() method

Through indexing, e.g., array[2]

By applying the find() function

7. What is the purpose of the numpy.arange() function?

1/1 ATTEMPTED

To create an array with evenly spaced values within a given range

To count the number of elements in an array

To reverse the order of elements in an array

To find the minimum value in an array

8. In NumPy, what does "vectorization" refer to?

1/1 ATTEMPTED

The process of creating vectors

The ability to perform operations on entire arrays without the need for explicit looping

Converting arrays into matrices

Sorting elements in an array

9.
Pandas is an open-source _____ Library?

1/1 ATTEMPTED

Ruby

Javascript

- Java
- Python

10.
What will be output for the following code?

```
import pandas as pd

s = pd.Series([1,2,3,4,5],index = ['a','b','c','d','e'])

print s['a']
```

1/1 ATTEMPTED

- 1
- 2
- 3
- 4

11. In Pandas, what is a DataFrame? a. A single value b. A two-dimensional labeled data structure with columns that can be of different data types c. A plotting library d. A statistical analysis tool

1/1 ATTEMPTED

- A single value
- A two-dimensional labeled data structure with columns that can be of different data types
- A plotting library

- A statistical analysis tool

12. In a Pandas DataFrame, what does the expression df.iloc[2, 7] refer to?

1/1 ATTEMPTED

- The element in the second row and seventh column
- The element in the seventh row and second column
- The seventh element in the second column
- The second element in the seventh row

13.
Which are pros of data visualization?

1/1 ATTEMPTED

- It can be accessed quickly by a wider audience.
- It can misrepresent information
- It can be distracting
- None Of the above

14.
Data can be visualized using?

1/1 ATTEMPTED

- graphs
- charts
- maps

- All of the above

15. The best suitable chart to display Data Trends is 1/1 ATTEMPTED

- Bar Chart
- Line chart
- Pie Chart
- Histogram

16.
What is the output of the following?

```
import numpy as np
x=np.array([1,2,3,6,10])
y=x
z=np.copy(x)
print(x)
print(y)
print(z)
```

1/1 ATTEMPTED

- [1,2,3,6,10] [1,2,3,6,10]
- [1,2,3,6,10] [1,2,3,6,10] [1,2,3,6,10]
- [1,2,3,6]
- [1,2,3,6] [1,2,3,6,10]

17.

What will be printed?

```
import numpy as np
a = np.array([1,2,3,5,8])
b = np.array([0,3,4,2,1])
c = a + b
c = c*a
print (c[2])
```

1/1 ATTEMPTED

- 7
- 12
- 10
- 21

18. Which of the following are advantages of Numpy? 1/1 ATTEMPTED

- Array oriented computing
- Efficiently implemented multi-dimensional arrays
- Designed for scientific computation
- All of these

19. Which of the following represents the number of dimensions in ndarray? 1/1 ATTEMPTED

- ndim
- shape

- size
- dtype

20. Which of the following returns the total number of elements in the ndarray? 1/1 ATTEMPTED

- ndim
- shape
- size
- dtype

21.
Point out the correct statement. 0/1 ATTEMPTED

- Statsmodels provides powerful statistics, econometrics, analysis and modeling functionality that is out of panda's scope
- Vintage leverages pandas objects as the underlying data container for computation
- Bokeh is a Python interactive visualization library for small datasets
- All of the mentioned

22.

1. Pandas is an open-source _____ Library? 1/1 ATTEMPTED

- Ruby
- Javascript
- Java
- Python

23. Which of the following is a reason that Pandas is used for analyzing the data? 1/1 ATTEMPTED

- It is fast, easy and expressive
- Flexible data manipulation
- Integrates well with matplotlib library
- All of these

24.
which function in Pandas is used to find the sum of all null values in a dataframe? 1/1 ATTEMPTED

- df.isnull().sum()
- df.isna().sum()
- both a and b
- df.isnull().sum()

25. What is the primary purpose of the Matplotlib library in Python? 1/1 ATTEMPTED

Data manipulation

- [x] Data visualization

- [ ] Machine learning

- [ ] Database management

26. Which function is used to create a line plot in Matplotlib? 1/1 ATTEMPTED

- [ ] plt.plot_line()

- [ ] plt.line()

- [x] plt.plot()

- [ ] plt.add_line()

27. How do you add a title to a Matplotlib plot? 1/1 ATTEMPTED

- [x] plt.title("My Title")

- [ ] plt.set_title("My Title")

- [ ] plt.add_title("My Title")

- [ ] plt.title.add("My Title")

28. Which function is used to set the limits of the x-axis in a Matplotlib plot? 1/1 ATTEMPTED

- [x] plt.xlim()

- [ ] plt.set_xlimits()

- plt.axis_limits()
- plt.x_axis_limits()

29. How can you create multiple plots in a single figure using Matplotlib?

1/1 ATTEMPTED

- Using plt.multiplot()
- Using plt.subplots()
- Using plt.add_subplot()
- Using plt.plot_subplots()

30. Which function would you use to save a Matplotlib figure to a file?

1/1 ATTEMPTED

- plt.save()
- plt.savefig()
- plt.write()
- plt.output()

31. What is the purpose of adding a legend to a Matplotlib plot?

ATTEMPTED

1/1

- To enhance the aesthetic appeal of the plot.
- To provide a key to distinguish between different datasets or plot elements.
- To show the exact data values.
-

To summarize the analysis performed on the data.

32. How can you specify the location of the legend in a Matplotlib plot?

1/1 ATTEMPTED

- By using plt.legend(location='best')
- By using plt.legend(position='top')
- By using plt.legend(loc='upper right')
- By using plt.legend(pos='center')

33. Which parameter can you use in plt.title() to change the font size of the title?

1/1 ATTEMPTED

- fontsize
- size
- font_size
- title_size

34. How can you set the x-axis to a logarithmic scale?

1/1 ATTEMPTED

- plt.xscale('log')
- plt.set_xscale('log')
- plt.scale_x('log')
- plt.x_axis_log()

35. What is the primary purpose of the Seaborn library in Python? ATTEMPTED

1/1

- Data manipulation
- Machine learning
- Data visualization
- Statistical modeling

36. Which function is used to create a heatmap in Seaborn? 1/1 ATTEMPTED

- sns.heatmap()
- sns.create_heatmap()
- sns.plot_heatmap()
- sns.heat_map()

37. What parameter controls the bandwidth of the KDE in Seaborn?

1/1 ATTEMPTED

- bw_adjust
- bandwidth
- bw
- adjust

38. How can you overlay multiple KDE plots for different groups in a single graph? 1/1 ATTEMPTED

- sns.kdeplot(data1) and sns.kdeplot(data2)
- sns.kdeplot(data1, overlay=True)
- sns.kdeplot([data1, data2])
- sns.kdeplot(data1, data2)

39. How can you set the x-axis limits when creating a KDE plot in Seaborn? 1/1 ATTEMPTED

- sns.kdeplot(x).set_xlim(left, right)
- sns.kdeplot(x, xlim=(left, right))
- plt.xlim(left, right) after plotting
- sns.kdeplot(x, limit=(left, right))

40.
Numpy developed by? 1/1 ATTEMPTED

- Guido van Rossum
- Travis Oliphant
- Wes McKinney
- Jim Hugunin

41.
Which of the following Numpy operation are correct? 1/1 ATTEMPTED

- Mathematical and logical operations on arrays.

- Fourier transforms and routines for shape manipulation.
- Operations related to linear algebra.
- All of the above

42.

The most important object defined in NumPy is an N-dimensional array type called?

1/1 ATTEMPTED

- ndarray
- narray
- nd_array
- darray

43.

The basic ndarray is created using?

0/1 ATTEMPTED

- numpy.array(object, dtype = None, copy = True, subok = False, ndmin = 0)
- numpy.array(object, dtype = None, copy = True, order = None, subok = False, ndmin = 0)
- numpy_array(object, dtype = None, copy = True, order = None, subok = False, ndmin = 0)
- numpy.array(object, dtype = None, copy = True, order = None, ndmin = 0)

44.

Which of the following statement is false?

1/1 ATTEMPTED

- ndarray is also known as the axis array.

- ndarray.dataitemSize is the buffer containing the actual elements of the array.
- NumPy main object is the homogeneous multidimensional array
- In Numpy, dimensions are called axes

45. What will be the output of the following Code: import pandas as pd import numpy as np s=pd.Series(np.random.randn(4)) print s

ATTEMPTED

0/1

- 0
- 1
- 2
- 3

46.
What is the output of the following?

```
import numpy as np
x=np.array([1,2,3,6,10])
y=x
z=np.copy(x)
print(x)
print(y)
print(z)
```

1/1 ATTEMPTED

- [1,2,3,6,10] [1,2,3,6,10]
- [1,2,3,6,10] [1,2,3,6,10] [1,2,3,6,10]
- [1,2,3,6]

- [1,2,3,6] [1,2,3,6,10]

47.

What will be output for the following code?

```
import numpy as np
ary = np.array([1,2,3,5,8])
ary = ary + 1
print (ary[1])
```

1/1 ATTEMPTED

- 0
- 1
- 2
- 3

48.

What will be output for the following code?

```
import numpy as np

a = np.array([1,2,3])

print a
```

1/1 ATTEMPTED

- [[1, 2, 3]]
- [1]
- [1,2,3]
- None

49. Which of the following represents the number of dimensions in ndarray?

1/1 ATTEMPTED

- (•) ndim
- ( ) shape
- ( ) size
- ( ) dtype

50. Which of the following returns the data type of elements in the array?

1/1 ATTEMPTED

- ( ) ndim
- ( ) shape
- ( ) size
- (•) dtype