

Your grade: 100%

 Your latest: **100%** • Your highest: **100%** • To pass you need at least 73%. We keep your highest score.

Next item →

1. What three key points form the basis for creating a visual?

1 / 1 point

- ☐ Less is ineffective; Less is not attractive; Less is not impactive.
- ☐ Less is more effective; Less is not attractive; Less is more impactive.
- ☐ Less is not attractive. Less is more attractive. Less is more impact
- ☒ Less is more effective; Less is more attractive; Less is more impactive.

 **Correct**

Correct! When creating a visual, the approach revolves around three key points less is more effective, more attractive, and more impactive. Every feature or design should support the intended message of the plot without causing distraction.

2. Which layer is an appropriate programming pattern when writing a web application server or UI application?

1 / 1 point

- ☐ FigureCanvas
- ☐ Backend Layer
- ☐ Scripting Layer
- ☒ Artist Layer

 **Correct**

Correct! The artist layer is where much of the heavy lifting happens and is usually the appropriate programming paradigm when writing a web application server or a UI application.

3. Which plot library is an excellent choice for geospatial data visualization and helps to create interactive and customizable maps?

1 / 1 point

- ☐ PyWaffle
- ☐ Matplotlib
- ☒ Folium
- ☐ Seaborn

 **Correct**

Correct! Folium is an excellent choice for geospatial data visualization and helps to create interactive and customizable maps.

4. Using Matplotlib magic functions which code starts the command?

1 / 1 point

- ☐ %matplotlib notebook
- ☐ \$matplotlib outline
- ☐ %matplotlib inline
- ☒ %matplotlib

 **Correct**

Correct! The command starts with "%matplotlib," and notebook is one of the Matplotlib backends. A sign of a magic function is that it starts with "%matplotlib."

5. What is the first step to creating an area plot?

1 / 1 point

- ☒ Import matplotlib as mpl
- ☐ Add title and label to both axes
- ☐ Call the plot function
- ☐ Use the show function

 **Correct**

Correct! First, we import matplotlib as mpl and its scripting interface as plt.

6. What is a way of statistically representing the distribution of the data through five main dimensions?

1 / 1 point

- ☐ Histogram
- ☐ Line plot
- ☒ Box plot
- ☐ Scatter plot



Correct

Correct! A box plot is a way of statistically representing given data distribution through five primary dimensions. These include Minimum, First quartile, Median, Third quartile, and Maximum.

7. Which dimension of the box plot signifies the smallest number in the sorted data?

1 / 1 point

- ☐ First quartile
- ☐ Third quartile
- ☒ Minimum
- ☐ Median



Correct

Correct! A box plot is a way of statistically representing given data distribution through five primary dimensions. One of the dimensions is Minimum. It is the smallest number in the sorted data.

8. What is a Waffle Chart?

1 / 1 point

- ☒ A visualization technique representing categorical data in square tiles or cells.
- ☐ It assists in analyzing textual content, such as articles, blogs, or research papers, in uncovering prevalent keywords or themes.
- ☐ It is a popular data visualization method to present textual data in an engaging and informative manner visually.
- ☐ It summarizes customer reviews or feedback to identify recurring themes or sentiments.



Correct

Correct! Waffle charts are a visualization technique that represents categorical data in the form of square tiles or cells. These resemble a grid of equal-sized squares, with each square representing a specific value or category.

9. What is Seaborn?

1 / 1 point

- ☒ It is a data visualization library based on Matplotlib that provides a high-level interface
- ☐ It is a visualization technique representing categorical data in square tiles or cells.
- ☐ It is an advanced visualization tool that depicts the importance of different words in the body of text.
- ☐ It is a popular data visualization method to present textual data in an engaging and informative manner visually.



Correct

Correct! Seaborn is a data visualization library based on Matplotlib. Its primary purpose is to build a high-level interface for drawing attractive statistical graphics, including regression plots, box plots, and more.

10. Folium is a powerful data visualization library in Python that primarily helps people visualize geospatial data. What is its default map style?

1 / 1 point

- ☐ Street-level map
- ☒ Open street map
- ☐ Stamen terrain
- ☐ Stamen toner



Correct

Correct! The default map style in Folium is the Open Street Map. It shows a street view of an area when you zoom in and shows the borders of the world countries when you zoom out all the way.

11. What feature enhances interactivity and provides contextual information to maps?

1 / 1 point

- ☐ Longitude

- ☐ Zoom function
- ☐ Latitude
- ☒ Markers



Correct

Correct! Markers represent specific locations or points of interest, providing additional information when clicked. Markers are like signposts that guide us through the map, highlighting essential elements.

12. Which tool allows you to switch between Jupyter Notebooks and standalone deployed apps and dashboards?

1 / 1 point

- ☐ Streamlit
- ☐ Voilà
- ☒ Panel
- ☐ Matplotlib



Correct

Correct! The panel allows you to easily switch between Jupyter Notebooks for creating quick data-exploration tools or as standalone deployed apps and dashboards as needed, providing flexibility in how you present and interact with your visualizations.

13. What is the key difference between Plotly Graph Objects and Plotly Express?

1 / 1 point

- ☐ Plotly Graph Objects provides a simpler syntax, while Plotly Express offers more customization options.
- ☐ Plotly Graph Objects focuses on 3-dimensional data, while Plotly Express focuses on statistical analysis.
- ☒ Plotly Graph Objects requires fewer commands, while Plotly Express automatically generates layout and figure objects.
- ☐ Plotly Graph Objects is a high-level wrapper, while Plotly Express is a low-level interface.



Correct

Correct! Plotly Graph Objects is a low-level interface and requires fewer commands to create figures, while Plotly Express is a high-level wrapper that automatically generates layout and figure objects.

14. What does the @app.callback decorator tell Dash when used in a Callback function?

1 / 1 point

- ☐ It tells output component children in the application layout.
- ☒ It tells that the function is automatically called by Dash whenever an input component's property changes.
- ☐ It tells you to provide the title to the dash app.
- ☐ It tells you to connect the input and output components to the desired properties.



Correct

Correct! A Callback function is automatically called by Dash whenever an input component's property changes.

15. What is a callback function?

1 / 1 point

- ☐ A file
- ☐ A line of code
- ☐ An extension
- ☒ A decorator



Correct

Correct! Whenever there is a change in the input component value, Dash calls the Callback function wrapped by the decorator, followed by the update to the output component children in the application layout.