* Overview of Visualization
* Different Python Libraries for Visualization
* Getting started with Visualization using Pandas
* Generate Test Data for Visualization
* Create Pandas Dataframe
* Plot using Pandas Dataframe
* Plot Pie Chart using Pandas Dataframe
* Plot Bar Chart using Pandas Dataframe
* Exercise and Solution

1. Which Python library is commonly used for data visualization?

a) NumPy

b) Pandas

c) Matplotlib

d) Scikit-learn

Answer: c) Matplotlib

1. Which Python library is used for creating 3D visualizations?

a) Matplotlib

b) Seaborn

c) Plotly

d) Pandas

Answer: c) Plotly

1. How can we install Pandas?

a) Using pip command: pip install pandas

b) Using conda command: conda install pandas

c) Both a) and b)

d) Pandas does not require any installation

Answer: c) Both a) and b)

1. How can we create a Pandas DataFrame from a dictionary?

a) Using pd.DataFrame.from\_dict()

b) Using pd.DataFrame.from\_dictlist()

c) Using pd.DataFrame.from\_records()

d) Using pd.DataFrame.from\_csv()

Answer: a) Using pd.DataFrame.from\_dict()

1. Which argument of the plot() method can be used to specify the type of chart to be plotted?

a) kind

b) type

c) chart\_type

d) plot\_type

Answer: a) kind

1. Which method of a Pandas DataFrame can be used to plot a pie chart?

a) pie()

b) plot()

c) scatter()

d) hist()

Answer: a) pie()

1. Which argument of the bar() method can be used to specify the x-axis labels?

a) x

b) labels

c) xlabels

d) xlabel

Answer: a) x

1. Which Python library can be used for generating random numbers?

a) NumPy

b) Pandas

c) Matplotlib

d) Scikit-learn

Answer: a) NumPy

1. Which function in NumPy can be used for generating random floating-point numbers?

a) random()

b) randint()

c) rand()

d) choice()

Answer: c) rand()

1. What is the advantage of using Pandas for data visualization?

a) Pandas allows easy manipulation and cleaning of data

b) Pandas has a wide range of statistical functions

c) Pandas can handle large datasets efficiently

d) Pandas has advanced machine learning algorithms

Answer: a) Pandas allows easy manipulation and cleaning of data