**Quiz 1: Data Structures in Pandas**

What is the primary data structure in pandas for storing tabular data?

A) Series

B) DataFrame

C) Array

D) List

Answer: B) DataFrame

To create a pandas DataFrame from a dictionary, which function should you use?

A) pd.create\_dataframe()

B) pd.from\_dict()

C) pd.DataFrame.from\_dict()

D) pd.dict\_to\_dataframe()

Answer: C) pd.DataFrame.from\_dict()

**Quiz 2: Series Operations**

What pandas function is used to calculate the mean of a Series?

A) mean()

B) average()

C) median()

D) mode()

Answer: A) mean()

How can you find the 75th percentile (Q3) of a Series in pandas?

A) series.percentile(75)

B) series.q3()

C) series.quantile(0.75)

D) series.median()

Answer: C) series.quantile(0.75)

**Quiz 3: Exploratory Data Analysis (EDA) with Pandas**

What pandas function is used to display the first few rows of a DataFrame?

A) show()

B) head()

C) display()

D) print\_first()

Answer: B) head()

In EDA, what is the purpose of creating a histogram?

A) To summarize descriptive statistics.

B) To visualize the distribution of a variable.

C) To calculate percentiles.

D) To compute the standard deviation.

Answer: B) To visualize the distribution of a variable.

**Quiz 4: Indexing with Pandas**

How can you select a specific column 'column\_name' from a DataFrame 'df' in pandas?

A) df.column\_name

B) df.select(column\_name)

C) df['column\_name']

D) df.get(column\_name)

Answer: C) df['column\_name']

What is the function used to filter rows in a DataFrame using boolean conditions in pandas?

A) filter()

B) where()

C) select()

D) boolean\_indexing()

Answer: B) where()

**Quiz 5: Aggregating Data and GroupBy**

What pandas function is used to group data in a DataFrame based on one or more columns?

A) group()

B) group\_by()

C) aggregate()

D) groupby()

Answer: D) groupby()

Which pandas function is used to calculate the mean of a numeric column for each group in a grouped DataFrame?

A) mean()

B) average()

C) agg()

D) calculate()

Answer: A) mean()

**Quiz 6: Custom Aggregations**

How can you apply a custom aggregation function 'custom\_agg\_func' to a DataFrame 'df' in pandas?

A) df.custom\_agg\_func()

B) df.apply(custom\_agg\_func)

C) df.custom\_agg\_func

D) df.aggregate(custom\_agg\_func)

Answer: B) df.apply(custom\_agg\_func)

What is the purpose of custom aggregations in pandas?

A) To create new DataFrames.

B) To summarize data in a custom way.

C) To plot data.

D) To delete rows from a DataFrame.

Answer: B) To summarize data in a custom way.