Mini Test-2

Q1. Given two DataFrames df1 and df2, how do you perform an inner join on a common column 'key'?

1. pd.concat([df1, df2], on='key', how='inner')
2. df1.merge(df2, on='key', how='inner')
3. df1.inner\_merge(df1, df2, key='key', method='inner')
4. df1.join(df2, key='key', method='inner')

Answer: B

Q2. How do you concatenate two DataFrames df1 and df2 along the rows?

1. pd.concat([df1, df2], axis=1)
2. pd.concat([df1, df2], axis=0)
3. df1.join(df2, axis=0)
4. df1.merge(df2, axis=0)

Answer: B

Q3. Given the following DataFrame df, how do you select the rows where the index is 1 or 2 and the columns are 'A' and 'B'

df = pd.DataFrame({

'A': [10, 20, 30],

'B': [40, 50, 60],

'C': [70, 80, 90]

})

A. df.loc[[1, 2], ['A', 'B']]

B. df.iloc[[1, 2], [0, 1]]

C. df.loc[1:2, ['A', 'B']]

D. All 3 options are correct

Answer D

Q4. Given the following DataFrame df, how do you select all rows where the value in column 'B' is greater than 45

df = pd.DataFrame({

'A': [10, 20, 30],

'B': [40, 50, 60],

'C': [70, 80, 90]

})

A. df.loc[df['B'] > 45]

B. df.iloc[df['B'] > 45]

C. df.iloc[df['B'] > 45, :]

D. df['B'] > 45

Answer: A

Q5. What is the output of the following Pandas code snippet?

import pandas as pd

s1 = pd.Series([11,12,13])

s2 = pd.Series([1,2,3,4])

s3=s1+s2

s3

A. 12.0, 14.0, 16.0, NaN

B. 12,14,16

C. Error due to shape difference

D. 11,12,13,1,2,3,4

Answer: A

Q6. Which of the following methods is used to read a CSV file into a pandas DataFrame?

1. pd.open\_csv()
2. pd.load\_csv()
3. pd.read\_csv()
4. pd.readfile\_csv()

Answer C

Q7. How can you access a specific column named 'Age' in a pandas DataFrame df?

1. df('Age')
2. df['Age']
3. df.Age()
4. df->Age

Answer: B

Q8. In pandas, how do you use a lambda function to convert a column df['amount'] to its absolute values?

1. df['amount'].lambda\_apply(lambda x: abs(x))
2. df.apply(lambda x: abs(x['amount']))
3. df['amount'].apply(lambda x: abs(x))
4. df.map(lambda x: abs(x['amount']))

Answer: C

Q9. In pandas, which function is used to check for missing or null values in a DataFrame df?

1. df.check\_null()
2. df.isnull()
3. df.null()
4. df.missing()

Answer: B

Q10. Which of the following lambda expressions extracts the first word from a string column df['text'] in a pandas DataFrame df?

1. df['text'].apply(lambda x: x.split()[0])
2. df.apply(lambda x: x['text'].split()[0])
3. df['text'].lambda\_apply(lambda x: x.split()[0])
4. df.map(lambda x: x['text'].split()[0])

Answer: A