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Question: In Pandas, which method is used to filter rows based on a condition?

- A) ``filter()``
- B) ``where()``
- C) ``loc[]``
- D) ``conditional()``

Correct Answer: C

2

Question: Given a Pandas DataFrame ``df`` with a column "Marks", which code snippet correctly displays rows where "Marks" is greater than 80?

- A) ``df[df["Marks"] > 80]``
- B) ``df.loc["Marks" > 80]``
- C) ``df.filter("Marks" > 80)``
- D) ``df.where(df["Marks"] > 80)``

Correct Answer: A

3

Question: In a Pandas Series, what does the ``mean()`` method calculate?

- A) The sum of all values.
- B) The average of all values.
- C) The middle value when sorted.
- D) The most frequent value.

Correct Answer: B

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Question: In NumPy, how do you create a 1-dimensional array named 'arr' with the values [1, 2, 3, 4, 5]?

- A) ``arr = np.array(1, 2, 3, 4, 5)``
- B) ``arr = np.array([1, 2, 3, 4, 5])``
- C) ``arr = np.array((1, 2, 3, 4, 5))``
- D) ``arr = np.oneDarray([1, 2, 3, 4, 5])``

Correct Answer: B

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Question: What is the time complexity of searching for a value in a balanced Binary Search Tree?

- A)  $O(n)$
- B)  $O(\log n)$
- C)  $O(n \log n)$
- D)  $O(1)$

Correct Answer: B

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Question: In the context of the exam instructions, what is the consequence of using a mobile phone?

- A) Extra time will be deducted.
- B) Marks will be deducted.
- C) The exam will be canceled.
- D) It is strictly prohibited.

Correct Answer: D