Java Programming Quiz - Mixed Difficulty

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Difficulty: Mixed
Total Questions: 3
Topic Focus: Java Programming

Instructions: Choose the best answer for each question. The correct answer is indicated after the options.

Question 1: What is the primary purpose of a Java class?

    A. To define a blueprint for objects

    B. To store data only

    C. To execute main method

    D. To handle exceptions

Correct Answer: A. To define a blueprint for objects

Explanation: A Java class serves as a blueprint or template for creating objects, defining their structure and behavior.

Question 2: Which keyword is used to create an object in Java?

    A. create

    B. new

    C. object

    D. instance

Correct Answer: B. new

Explanation: The "new" keyword is used in Java to create new instances (objects) of a class.

Question 3: What is the time complexity of searching in a balanced binary search tree?

    A. O(1)

    B. O(log n)

    C. O(n)

    D. O(n²)

Correct Answer: B. O(log n)

Explanation: In a balanced binary search tree, the height is O(log n), making search operations O(log n) time complexity.