

OPERATORS IN JAVA

A. Tick (✓) the correct option.

1. What is the correct syntax for incrementing a variable x by 1?

a. `x = x + 1;`

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b. `x += 1;`

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c. `x++;`

☐

d. All of the above

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2. What does the expression `(a > b) ? a : b` return?

a. The larger of a and b

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b. The smaller of a and b

☐

c. The sum of a and b

☐

d. An error

☐

B. Fill in the Blanks

1. The operator increases the value of a variable by 1.

2. The operator decreases the value of a variable by 1.

3. assignment operator is used to multiply and assign a value to a variable.

4. operator is used to perform bitwise AND operation.

C. Match the Following

Column A

1. `x++`

2. `++x`

3. `&=`

4. `?:`

Column B

i. Bitwise AND assignment

ii. Ternary operator

iii. Prefix increment

iv. Postfix increment

D. Short Questions

1. What is the difference between prefix `(++)` and postfix `(++)` increment operators?

2. Explain shorthand assignment operators with examples.

3. What is bitwise AND (`&`) operator used for?

4. Write an example using the ternary operator.