

MCQ 1: Which operator in Java is used to test if two primitive values are equal?

- (a) =
 - (b) ==
 - (c) !=
 - (d) equals
-

MCQ 2: Which relational operator checks if the left operand is greater than the right operand?

- (a) >
 - (b) < (c) >=
 - (d) <=
-

MCQ 3: Which operator is used to check if two operands are not equal in Java?

- (a) <>
 - (b) !=
 - (c) ~=
 - (d) !==
-

MCQ 4: What is the correct operator to check if one value is less than or equal to another?

- (a) <=
 - (b) =< (c) <==
 - (d) =<=
-

MCQ 5: Which relational operator checks if one value is greater than or equal to another?

- (a) >=
 - (b) =>
 - (c) >
 - (d) <
-

MCQ 6: Which unary operator increments a variable's value by one?

- (a) --
 - (b) ++
 - (c) +
 - (d) +=
-

MCQ 7: Which unary operator decrements a variable's value by one?

- (a) --
 - (b) ++
 - (c) -
 - (d) -=
-

MCQ 8: What is the main difference between the pre-increment (++x) and post-increment (x++) operators?

- (a) Pre-increment increments after the value is used, post-increment increments before.
 - (b) Pre-increment increments before the value is used, post-increment increments after.
 - (c) They both increment at the same time.
 - (d) Only pre-increment is valid in Java.
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MCQ 9: Which unary operator in Java is used to negate a boolean value?

- (a) -
 - (b) ! (c) ~ (d) not
-

MCQ 10: Which operator returns the original value before performing the increment?

- (a) Pre-increment (++x)
 - (b) Post-increment (x++)
 - (c) Both return the same value
 - (d) Neither; they both return the new value
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MCQ 11: Which unary operators are not applicable to boolean types in Java?

- (a) ! (b) ++
 - (c) --
 - (d) Both ++ and --
-

MCQ 12: What does the unary minus operator do to a numeric expression?

- (a) Converts a positive number to a negative number
 - (b) Increments the number
 - (c) Decrements the number
 - (d) Leaves the number unchanged
-

MCQ 13: Which of the following is a valid use of a unary operator in Java?

- (a) `int a = -5;`
 - (b) `int a = ++-5;`
 - (c) `int a = !5;`
 - (d) `int a = --+5;`
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MCQ 14: What does the expression `x++` do in Java?

- (a) Increments `x` and returns the new value
 - (b) Increments `x` but returns the original value
 - (c) Decrements `x` and returns the original value
 - (d) Leaves `x` unchanged
-

MCQ 15: What does the expression `--y` do in Java?

- (a) Returns `y` then decrements it
 - (b) Decrements `y` and returns the new value
 - (c) Increments `y` and returns the new value
 - (d) Returns `y` then increments it
-

MCQ 16: Which operator is used to get the bitwise complement of a number's bits?

- (a) ! (b) ~ (c) -
 - (d) ++
-

MCQ 17: If `x` is 5, what value does the expression `++x` yield when used in an expression context?

- (a) 5
 - (b) 6
 - (c) 4
 - (d) Undefined
-

MCQ 18: If `x` is 5, what value does the expression `x++` yield when used in an expression context?

- (a) 5
 - (b) 6
 - (c) 7
 - (d) 4
-

MCQ 19: Which of the following statements is true regarding operator overloading in Java?

- (a) The '+' operator can be overloaded
 - (b) The '-' operator can be overloaded
 - (c) The '++' operator can be overloaded
 - (d) None of the unary operators can be overloaded
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MCQ 20: Which of the following is **not** considered a relational operator in Java?

- (a) ==
 - (b) !=
 - (c) ++
 - (d) <=
-

MCQ 21: In the statement `if(a != b)`, what is being tested?

- (a) Whether `a` is equal to `b`
 - (b) Whether `a` is not equal to `b`
 - (c) Whether `a` is greater than `b`
 - (d) Whether `a` is less than `b`
-

MCQ 22: Which relational operator would you use to compare the order of two numeric values?

- (a) =
 - (b) >
 - (c) ==
 - (d) All of the above
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MCQ 23: What is the result of evaluating the expression `7 < 10` in Java?

- (a) 7
 - (b) 10
 - (c) true
 - (d) false
-

MCQ 24: Among the following, which group of operators has the highest precedence in Java?

- (a) Unary operators (e.g., ++, --, -)
 - (b) Relational operators (e.g., <, >, ==)
 - (c) Logical AND operator
 - (d) Logical OR operator
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MCQ 25: Which of the following demonstrates the proper use of a unary operator on a boolean variable?

- (a) `boolean flag = true; flag = -flag;`
- (b) `boolean flag = true; flag = !flag;`
- (c) `boolean flag = true; flag = ++flag;`
- (d) `boolean flag = true; flag = --flag;`

MCQ 26: In the expression `++a + a++`, which of the following statements best describes the order of operations?

- (a) Both increments occur before the addition
- (b) The first increment occurs before addition and the second after
- (c) The first increment occurs after addition and the second before
- (d) Both increments occur after the addition

MCQ 27: Which unary operator produces the negative of a numeric expression?

- (a) +
- (b) -
- (c) !
- (d) ++

MCQ 28: If `a` is 10, what does the expression `a--` do?

- (a) Returns 10 then decrements `a` to 9
- (b) Returns 9 then decrements `a` to 8
- (c) Returns 10 then increments `a`
- (d) Returns 9 then increments `a`

MCQ 29: Which of the following data types cannot be used with the unary increment (`++`) and decrement (`--`) operators in Java?

- (a) float
- (b) int
- (c) char
- (d) boolean

MCQ 30: Which of the following expressions correctly demonstrates the use of the unary minus operator in Java?

- (a) `int result = -5;`
- (b) `int result = --5;`
- (c) `int result = 5 -;`
- (d) `int result = +5 -;`

Coding

MCQ 1:

```
int x = 10;
int y = x++;
System.out.println(x);
```

What is the output?

- (a) 10
- (b) 11
- (c) 12
- (d) 9

MCQ 2:

```
int a = 5;
int b = ++a;
System.out.println(b);
```

What does this code print?

- (a) 5
 - (b) 6
 - (c) 7
 - (d) Compilation error
-

MCQ 3:

```
int a = 5;  
int b = a++;  
System.out.println(b);
```

What is the output?

- (a) 5
 - (b) 6
 - (c) 7
 - (d) Runtime error
-

MCQ 4:

```
int a = 3;  
System.out.println(-a);
```

What value is printed?

- (a) 3
 - (b) -3
 - (c) 0
 - (d) Compilation error
-

MCQ 5:

```
int x = 4;  
System.out.println(++x + x++);
```

What is the result of this expression?

- (a) 9
 - (b) 10
 - (c) 11
 - (d) 8
-

MCQ 6:

```
int a = 10, b = 10;  
System.out.println(a == b);
```

What does this print?

- (a) true
 - (b) false
 - (c) 0
 - (d) Compilation error
-

MCQ 7:

```
int a = 7, b = 9;  
System.out.println(a != b);
```

What is the output?

- (a) true
 - (b) false
 - (c) 7
 - (d) Compilation error
-

MCQ 8:

```
int x = 8;  
System.out.println(x--);
```

What is printed by this statement?

- (a) 7
 - (b) 8
 - (c) 9
 - (d) Runtime error
-

MCQ 9:

```
int x = 8;  
System.out.println(--x);
```

What value does this print?

- (a) 7
 - (b) 8
 - (c) 9
 - (d) Compilation error
-

MCQ 10:

```
int x = 5;  
int y = x;  
System.out.println(++x == y++);
```

What is the output of this expression?

- (a) true
 - (b) false
 - (c) 5
 - (d) Compilation error
-

MCQ 11:

```
int a = 10;  
int b = 5;  
System.out.println(a >= b);
```

What does the code print?

- (a) true
- (b) false

- (c) 10
- (d) 5

MCQ 12:

```
int a = 10;
int b = 10;
System.out.println(a <= b);
```

What is the output?

- (a) true
- (b) false
- (c) 10
- (d) 0

MCQ 13:

```
int a = 15;
System.out.println(a == 15);
```

What does this print?

- (a) true
- (b) false
- (c) 15
- (d) Compilation error

MCQ 14:

```
int a = -5;
System.out.println(-a);
```

What is the output of this code?

- (a) -5
- (b) 5
- (c) 0
- (d) Runtime error

MCQ 15:

```
int x = 0;
x++;
System.out.println(x);
```

What value is printed?

- (a) 0
- (b) 1
- (c) 2
- (d) Compilation error

MCQ 16:

```
int x = 0;
++x;
```

```
System.out.println(x);
```

What is the output?

- (a) 0
 - (b) 1
 - (c) 2
 - (d) Error
-

MCQ 17:

```
int a = 3;  
int b = a++;  
int c = ++a;  
System.out.println(a + b + c);
```

What is the sum printed?

- (a) 11
 - (b) 12
 - (c) 13
 - (d) 14
-

MCQ 18:

```
int x = 7;  
System.out.println(x > 5);
```

What does this code print?

- (a) true
 - (b) false
 - (c) 7
 - (d) Compilation error
-

MCQ 19:

```
int x = 7;  
System.out.println(x < 7);
```

What is the output?

- (a) true
 - (b) false
 - (c) 0
 - (d) Runtime error
-

MCQ 20:

```
int x = 7;  
System.out.println(x == 7);
```

What does this print?

- (a) true
- (b) false
- (c) 7
- (d) Compilation error