***Operators in Programming***

In programming, operators are symbols or keywords that perform specific operations on one or more operands (variables or values). They allow you to manipulate and operate on data in various ways. Here are some commonly used types of operators in programming:

1. Arithmetic Operators:

- Addition (+): Adds two operands.

- Subtraction (-): Subtracts the second operand from the first.

- Multiplication (\*): Multiplies two operands.

- Division (/): Divides the first operand by the second.

- Modulus (%): Returns the remainder of the division.

- Increment (++): Increases the value of an operand by 1.

- Decrement (--): Decreases the value of an operand by 1.

2. Assignment Operators:

- Assignment (=): Assigns a value to a variable.

- Compound assignment operators (e.g., +=, -=, \*=): Perform an operation and assign the result to the variable.

3. Comparison Operators:

- Equal to (==): Checks if two operands are equal.

- Not equal to (!=): Checks if two operands are not equal.

- Greater than (>): Checks if the left operand is greater than the right.

- Less than (<): Checks if the left operand is less than the right.

- Greater than or equal to (>=): Checks if the left operand is greater than or equal to the right.

- Less than or equal to (<=): Checks if the left operand is less than or equal to the right.

4. Logical Operators:

- Logical AND (&&): Returns true if both operands are true.

- Logical OR (||): Returns true if either operand is true.

- Logical NOT (!): Inverts the logical state of an operand.

5. Bitwise Operators:

- Bitwise AND (&): Performs a bitwise AND operation.

- Bitwise OR (|): Performs a bitwise OR operation.

- Bitwise XOR (^): Performs a bitwise exclusive OR operation.

- Bitwise NOT (~): Inverts the bits of an operand.

- Left shift (<<): Shifts the bits of the left operand to the left.

- Right shift (>>): Shifts the bits of the left operand to the right.

6. Conditional Operator (Ternary Operator):

- Conditional (?:): Evaluates a condition and returns one of two possible values based on the result.

These are some of the common operator types in programming, but different programming languages may have additional operators specific to their syntax and features.