**OPERATORS**

Operators are symbols that tell compiler to perform some operations

*Arithmetic Operators*

**1.** Binary Operator (+, -, \*, /, %)

**2.** Unary Operator (Increment (++), Decrement (--))

Increment (++)

1. Pre-Increment ++a -> First change value, then use value
2. Post Increment a++ -> First use value, then change value

Decrement (--)

1. Pre-Decrement --a -> First change value, then use value
2. Post Decrement a-- -> First use value, then change value

*Relational Operators* - (Its output is a Boolean value.)

(==, !=, >, <, >=, <=)

*Logical Operators* –

1. Logical AND (&&) – Both conditions should be true.
2. Logical OR (||) – Any one condition must be true.
3. Logical NOT (!) – It reverses the actual output and gives a new output.

**NUMBER SYSTEM**

*Binary Number System* (Base 2)

*Decimal Number System* (Base 10)

*Octal Number System* (Base 8)

*Hexadecimal Number System* (Base 16)

*Bitwise Operators* – Used for binary numbers.

True – 1, False – 0

1. Bitwise AND (&) –
2. Bitwise OR (|) –
3. Binary XOR (^) – Similar values gives False, different values gives True.
4. Binary Complement (~) – converts 0 to1 and 1 to 0.
5. Binary Left Shift (<<) – To shift one position left and the remaining blank position will get 0.
6. Binary Right Shift (>>) – To shift one position right and the remaining blank position will get 0.

*Assignment Operators* – (=, +=, -=, \*=, /=, %=)