**Types of Operators**

**1. Arithmetic Operators ( + , - , \* , / , % )**

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

num2 = num1 --- would assign the variable num1 to num1

num2 += num1 --- means num2 = num2 + num1

num2 -= num1 --- means num2 = num2 - num1

num2 \*= num1 --- means num2 = num2 \* num1

num2 /= num1 --- means num2 = num2 / num1

num2 %= num1 --- means num2 = num2 % num1

**3. Logical Operators ( && , || , ! )**

are used with binary variable mainly in conditional statements and loops to evaluate a condition

b1 && b2 -- returns true if both b1 and b2 are true else it would return false

b1 || b2 -- returns false if both b1 and b2 are false else would return true

!b1 would return the opposite of b1, that means it would be true if b1 is false and it would return false if b1 is true

**4. Comparison (Relational) Operators ( == , != , > , < , >= , < = )**

== -- returns true if left side and right side are equal

!= -- returns true if left side is not equal to right side of operator

> -- returns true is left side is greater the right side

< -- returns true if left side is less than the right side

>= -- returns true if left side is greater than or equal to right side

<= -- returns true if left side is less than or equal to right side

**5. Auto-increment and Auto-decrement Operators ( ++ , -- )**

num ++ means num = num + 1

num -- means num = num - 1

**6. Ternary Operators:**

This Operator evaluates a Boolean expression and assign the value based on the result

Variable num1 = ( expression ) ? value if true : value if false

int n1, n2;

n1 = 100;

n2 = (n1 == 10) ? 500 : 1000;