OPERATORS

1. Arthimetic operators:- These operators are used to perform basic mathematical operations.

- + : Addition
- - : Subtraction
- * : Multiplication
- / : Division
- % : Modulus (remainder of division)

2.RELATIONAL OPERATORS:- RELATIONAL OPERATORSTHESE OPERATORS ARE USED TO COMPARE TWO VALUES.

- == : EQUAL TO
- != : NOT EQUAL TO
- > : GREATER THAN
- < : LESS THAN
- >= : GREATER THAN OR EQUAL TO
- <= : LESS THAN OR EQUAL TO

3. **LOGICAL OPERATORS**:-THESE OPERATORS ARE USED TO COMBINE MULTIPLE CONDITIONS.

- && : LOGICAL AND
- || : LOGICAL OR
- ! : LOGICAL NOT

4. ASSIGNMENT OPERATORS :- ARE USED TO ASSIGN VALUES TO VARIABLES.

- = : SIMPLE ASSIGNMENT
- += : ADD AND ASSIGN
- -= : SUBTRACT AND ASSIGN
- *= : MULTIPLY AND ASSIGN
- /= : DIVIDE AND ASSIGN
- %= : MODULUS AND ASSIGN
- &= : BITWISE AND AND ASSIGN
- |= : BITWISE OR AND ASSIGN
- ^= : BITWISE XOR AND ASSIGN
- <<=: LEFT SHIFT AND ASSIGN
- >>=: RIGHT SHIFT AND ASSIGN

5. BITWISE OPERATORS :-THESE OPERATORS PERFORM OPERATIONS ON BITS AND ARE USED FOR LOW-LEVEL PROGRAMMING.

- & : BITWISE AND
- | : BITWISE OR
- ^ : BITWISE XOR (EXCLUSIVE OR)
- ~ : BITWISE NOT (COMPLEMENT)
- << : LEFT SHIFT• >> : RIGHT SHIFT

6. CONDITIONAL (TERNARY) OPERATOR :-THIS OPERATOR IS A SHORTHAND FOR THE IF-ELSE STATEMENT.

- ? : : SYNTAX: CONDITION ? EXPRESSION1 : EXPRESSION2;
- IF CONDITION IS TRUE, EXPRESSION1 IS EVALUATED; OTHERWISE, EXPRESSION2 IS EVALUATED.

7. INCREMENT AND DECREMENT OPERATORS:-

THE INCREMENT OPERATOR INCREASES THE VALUE OF A VARIABLE BY 1. IT CAN BE USED IN TWO FORMS:

1. PREFIX INCREMENT (++X): THE VARIABLE IS INCREMENTED FIRST, AND THEN ITS VALUE IS USED IN THE EXPRESSION.

2. POSTFIX INCREMENT (X++): THE CURRENT VALUE OF THE VARIABLE IS USED IN THE EXPRESSION FIRST, AND THEN THE VARIABLE IS INCREMENTED

THE DECREMENT OPERATOR DECREASES THE VALUE OF A VARIABLE BY

1. LIKE THE INCREMENT OPERATOR, IT CAN ALSO BE USED IN TWO FORMS:

1. PREFIX DECREMENT (--X): THE VARIABLE IS DECREMENTED FIRST, AND THEN ITS VALUE IS USED IN THE EXPRESSION.

2. POSTFIX DECREMENT (X--): THE CURRENT VALUE OF THE VARIABLE IS USED IN THE EXPRESSION FIRST, AND THEN THE VARIABLE IS DECREMENTED.