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Computer System and Programming in 'C'  
CS-101/201

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## Operators

## Operators

- Type
  - Unary
  - Binary
  - Ternary

## Unary Operators

## Unary Operators

- 1. Increment
  - Pre-increment
  - Post-increment
- 2. Decrement
  - Pre-decrement
  - Post-decrement

## Binary Operators

## 1. Arithmetic Operators

- +
- -
- \*
- /
- %

## 2. Assignment Operators

- =
- +=
- -=
- \*=
- /=
- %=

## 3. Relational Operators

A relational operator checks the relationship between two operands. If the relation is **true**, it returns **1**. If the relation is **false**, it returns value **0**.

- ==
- >
- <
- !=
- >=
- <=

## 4. Logical Operators

An expression containing logical operator returns either 0 or 1 depending upon whether expression results true or false.

- Logical AND (&&)
- Logical OR (||)
- Logical NOT (!)

## 5. Comma Operators

Comma operator is used to link related expression together.

## 6. Bitwise Operators

During computation, mathematical operations like +, - and / are converted to bit-level which makes processing faster and saves power.

- Bitwise AND (&)
- Bitwise OR (|)
- Bitwise exclusive OR (^)
- Bitwise compliment (~)
- Shift Left (<<)
- Shift Right (>>)

## Ternary Operator

### Ternary Operator (?:)

A conditional operator is a ternary operator, that is it works on three operands.

- Syntax:

`ConditionalExpression?expression1:expression2;`

If ConditionalExpression is **true**, expression1 is evaluated.

If ConditionalExpression is **false**, expression2 is evaluated.

**Thank You.**



**BTQ**

***BTQ: Brain Teaser Question***

*What has a head and a tail, but no body?*

