# Notes on Operators and Conditional Statements

## Address Operator - &

## Arithmetic Operators

* Addition: +
* Subtraction: -
* Multiplication: \*
* Division: /
* Modulus: % (remainder part of division operation)
* Increment by 1: ++ (e.g., x++ means x = x + 1)
* Decrement by 1: -- (e.g., x-- means x = x - 1)
* Add and Assign: += (e.g., x += 5 means x = x + 5)
* Subtract and Assign: -=
* Multiply and Assign: \*=
* Divide and Assign: /=
* Modulus and Assign: %=

## Relational Operators

* Less than: <
* Greater than: >
* Less than or equal to: <=
* Greater than or equal to: >=
* Equal to: ==
* Not equal to: !=

## Objective

Accept a number and print whether it is less than or greater than 50. We will use if-else statements.

## Syntax for if-else Statements

### Basic if Statement:

if (condition) {  
 // If the condition is true, the code inside this block will execute  
}

### if-else Statement:

if (condition) {  
 // If the condition is true, the code inside this block will execute  
} else {  
 // If the condition is false, the code inside this block will execute  
}

- If the condition is true, the if block will execute, and the else block will be bypassed.  
- The else block is optional.

### if-else Ladder:

if (condition1) {  
 // If condition1 is true, this block will execute  
} else if (condition2) {  
 // If condition1 is false and condition2 is true, this block will execute  
} else {  
 // If none of the above conditions are true, this block will execute  
}