

Welcome,  
PROGRAMMERS



01.

What is Control Structure?

What is

Control  
Structure ?



# Control Structure

A control structure is a **block of code** that **manages the flow of execution in a program.**

Control structures dictate the order in which statements are executed based on certain conditions.

# Types of Control Structure

## Types of Control Structure

1. **Sequential Structure:** The default structure where statements are executed one after the other in sequence.
2. **Selection Structure (Conditional Statements):** Allows the program to make decisions and execute different blocks of code based on specified conditions.
3. **Repetition Structure (Loops):** Allows the execution of a block of code repeatedly as long as a specified condition is true.



# Sequential Structure



# Sequential Structure

The default structure where **statements are executed one after the other in sequence.**

```
main()
{
    // Statement 1
    // Statement 2
    // Statement 3
}
```



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# Selection Structure (Conditional Statements)



# Selection Structure (Conditional Statements) ● ○ ●

Allows the program to **make decisions** and **execute different blocks of code based on specified conditions**.

```
if statement if
else statement
ladder statement
nested statements
ternary statement
switch case
```







03

# Repetition Structure (Loops)



# Repetition Structure (Loops)

Allows the **execution of a block of code repeatedly** as long as a specified **condition is true**.

1. Entry Control Loop
  - while loop
  - for loop
2. Exit Control Loop
  - do while loop



Let's see **Conditional Statements** in detail...



# If statement

```
if (condition)
```

```
{}
```

```
// Code to be executed if the condition is true
```

# If else statement

```
if (condition)
```

```
{ } else { }
```

```
// Code to be executed if the condition is true
```

```
// Code to be executed if the condition is false
```

# Ladder statement

```
if (condition 1) { }  
else if (condition 2)  
{ } else if (condition  
3) { } else { }
```

```
// Code to be executed if condition 1 is true
```

```
// Code to be executed if condition 2 is true
```

```
// Code to be executed if condition 3 is true
```

```
// Code to be executed if none of the conditions is true
```



# LaNgage

Let's start now...

