



CONTROL STRUCTURES

OBJECT ORIENTED PROGRAMMING I

Sercan Külcü | Object Oriented Programming I | 10.01.2023

Contents

Introduction	2
If-Else Statements	3
For Loops.....	4
While Loops	5
Do-While Loops.....	6
Switch Statements	7
Conclusion	8

Introduction

Control structures are an essential part of any programming language. They are used to control the flow of a program, allowing you to decide which parts of your code are executed and which are skipped. Java, like many other programming languages, provides several types of control structures that can be used to control the flow of your program. In this chapter, we will discuss the different types of control structures in Java and how to use them effectively.

If-Else Statements

If-else statements are one of the most commonly used control structures in Java. They allow you to test a condition and execute one block of code if the condition is true, or another block of code if the condition is false. If-else statements are used extensively in Java programs to make decisions based on user input, data input, or other factors.

For Loops

For loops are another important control structure in Java. They allow you to execute a block of code a specific number of times, based on a counter variable. For loops are often used in Java programs to iterate over arrays or other data structures, and to perform repetitive tasks.

While Loops

While loops are similar to for loops, but they allow you to execute a block of code as long as a certain condition is true. While loops are often used in Java programs to perform tasks that require an unknown number of iterations, such as reading data from a file or processing user input.

Do-While Loops

Do-while loops are similar to while loops, but they always execute the block of code at least once, even if the condition is false. Do-while loops are often used in Java programs to ensure that a certain task is performed at least once, such as displaying a menu or prompting the user for input.

Switch Statements

Switch statements are used to test a variable against a series of possible values, and execute a block of code based on the value of the variable. Switch statements are often used in Java programs to handle user input, or to perform different actions based on the state of a program.

Conclusion

Control structures are an essential part of any Java program. They allow you to control the flow of your code and make decisions based on user input, data input, or other factors. In this chapter, we have discussed the different types of control structures in Java, including if-else statements, for loops, while loops, do-while loops, and switch statements. By mastering these control structures, you can create more efficient and effective Java programs that are easier to maintain and debug.