

# Day 4: Java Conditional Statements

---

## Yesterday's Recap:

In Day 3, we learned about Java methods and arrays. We explored how to declare and call methods, as well as how to create and manipulate arrays in Java.

## Today's Agenda:

Today, we're going to dive into Java conditional statements. We'll learn about if-else statements, switch statements, and conditional operators.

### If-Else Statements:

If-else statements are used to execute different blocks of code based on conditions. The basic syntax is:

```
if (condition) {  
    // code to be executed if condition is true  
} else {  
    // code to be executed if condition is false  
}
```

Here's an example:

```
int x = 10;  
if (x > 5) {  
    System.out.println("x is greater than 5");  
} else {  
    System.out.println("x is less than or equal to 5");  
}
```

### Switch Statements:

Switch statements are used to execute different blocks of code based on the value of an expression. The basic syntax is:

```
switch (expression) {  
    case value1:  
        // code to be executed if expression equals value1  
        break;  
    case value2:  
        // code to be executed if expression equals value2  
        break;  
    default:  
        // code to be executed if expression does not match any case  
}
```

Here's an example:

```
int day = 2;  
switch (day) {  
    case 1:  
        System.out.println("Monday");  
        break;
```

case 2:

```
System.out.println("Tuesday");
```

```
break;
```

case 3:

```
System.out.println("Wednesday");
```

```
break;
```

default:

```
System.out.println("Unknown day");
```

```
}
```

### **Conditional Operators:**

Conditional operators are used to evaluate conditions and return a value based on the result. The basic syntax is:

condition ? true\_value : false\_value

Here's an example:

```
int x = 10;
```

```
String result = x > 5 ? "x is greater than 5" : "x is less than or equal to 5"; System.out.println(result);
```

### **Challenges:**

---

1. Write a program that uses an if-else statement to determine whether a number is even or odd.
  2. Write a program that uses a switch statement to determine the day of the week based on a number (1-7).
- 

### **Code:**

You can find the code for today's challenges in the Day4 folder of this repository.

### **Join the Conversation:**

How was your experience with conditional statements today? Did you encounter any challenges or have any questions? Share your thoughts in the comments below!

---