

Computer Programming in Java

Lecture 3 IF..ELSE

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Java If ... Else

Java has the following conditional statements You already know that

- Use if to specify a block of code to be executed, if a specified condition is true
- Use else to specify a block of code to be executed, if the same condition is false
- Use else if to specify a new condition to test, if the first condition is false

The if Statement

- Use the if statement to specify a block of Java code to be executed if a condition is true.

```
if (condition) {
    // block of code to be executed if the condition is true
}
```

- In the example below, we test two values to find out if 20 is greater than 18. If the condition is true, print some text:

```
if (20 > 18) {  
    System.out.println("20 is greater than 18");  
}
```

- We can also test variables:

```
int x = 20;  
int y = 18;  
if (x > y) {  
    System.out.println("x is greater than y");  
}
```

The else Statement

- Use the else statement to specify a block of code to be executed if the condition is false.

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

- Example

```
int time = 20;
if (time < 18) {
    System.out.println("Good day.");
} else {
    System.out.println("Good evening.");
}
// Outputs "Good evening."
```

The else if Statement

- Use the else if statement to specify a new condition if the first condition is false.

```
if (condition1) {  
    // block of code to be executed if condition1 is true  
} else if (condition2) {  
    // block of code to be executed if the condition1 is false and condition2 is  
    // true  
} else {  
    // block of code to be executed if the condition1 is false and condition2 is  
    // false  
}
```

- Example

```
int time = 22;  
if (time < 10) {  
    System.out.println("Good morning.");  
} else if (time < 18) {  
    System.out.println("Good day.");  
} else {  
    System.out.println("Good evening.");  
}  
// Outputs "Good evening."
```