Java If ... Else

‹ Previous Next ›

Java Conditions and If Statements

Java supports the usual logical conditions from mathematics:

- Less than: `a < b`
- Less than or equal to: `a <= b`
- Greater than: `a > b`
- Greater than or equal to: `a >= b`
- Equal to `a == b`
- Not Equal to: `a != b`

You can use these conditions to perform different actions for different decisions.

Java has the following conditional statements:

- 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
- Use `switch` to specify many alternative blocks of code to be executed

The if Statement

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

Syntax

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

Note that `if` is in lowercase letters. Uppercase letters (If or IF) will generate an error.

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:

Example

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

Try it Yourself »

We can also test variables:

Example

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

Try it Yourself »

Example explained

In the example above we use two variables, **x** and **y**, to test whether x is greater than y (using the `>` operator). As x is 20, and y is 18, and we know that 20 is greater than 18, we print to the screen that "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`.

Syntax

```
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.");

  System.out.println("Good evening.");
}
// Outputs "Good evening."
```

Try it Yourself »

Example explained

In the example above, time (20) is greater than 18, so the condition is `false`. Because of this, we move on to the `else` condition and print to the screen "Good evening". If the time was less than 18, the program would print "Good day".

The else if Statement

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

Syntax

```
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 t
} else {
  // block of code to be executed if the condition1 is false and condition2 is f
}
```

Example

```
int time = 22;
if (time < 10) {
  System.out.println("Good morning.");

  System.out.println("Good day.");
} else {
  System.out.println("Good evening.");
}
// Outputs "Good evening."
```

Try it Yourself »

Example explained

In the example above, time (22) is greater than 10, so the **first condition** is `false`. The next condition, in the `else if` statement, is also `false`, so we move on to the `else` condition since **condition1** and **condition2** is both `false` - and print to the screen "Good evening".

However, if the time was 14, our program would print "Good day."

Test Yourself With Exercises

Exercise:

Print "Hello World" if `x` is greater than `y`.

```
int x = 50;
int y = 10;
    (x    y) {
```

```
  System.out.println("Hello World");
}
```

Submit Answer »

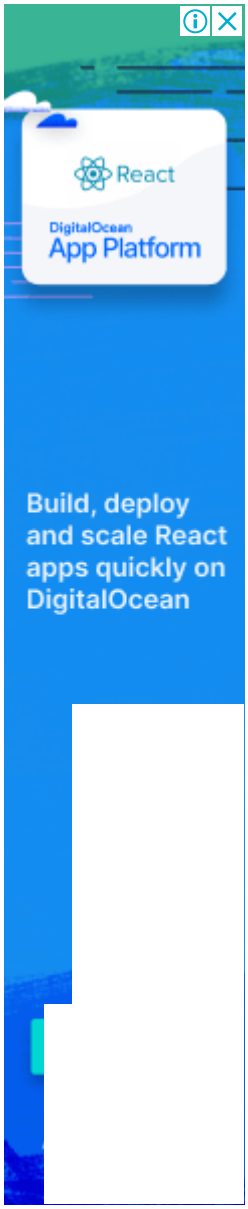
Start the Exercise

‹ Previous

Next ›

COLOR PICKER

CODE GAME



Top Tutorials

PHP Tutorial
Java Tutorial
C++ Tutorial
jQuery Tutorial

Top References

HTML Reference
CSS Reference
JavaScript Reference
SQL Reference
Python Reference
W3.CSS Reference
Bootstrap Reference
PHP Reference
HTML Colors
Java Reference
Angular Reference
jQuery Reference

Top Examples

HTML Examples
CSS Examples
JavaScript Examples
How To Examples
SQL Examples
Python Examples
W3.CSS Examples
Bootstrap Examples
PHP Examples
Java Examples
XML Examples
jQuery Examples

Get Certified

HTML Certificate
CSS Certificate
JavaScript Certificate
Front End Certificate
SQL Certificate
Python Certificate
PHP Certificate
jQuery Certificate
Java Certificate
C++ Certificate
C# Certificate
XML Certificate