

PHP Conditionals

PHP else statement

A PHP else statement can follow an if block. If the condition of the if does not evaluate to TRUE, the code block following else will be executed.

```
$condition = FALSE;
if ($condition) {
    // This code block will not execute
} else {
    // This code block will execute
}
```

PHP comparison operators

PHP *comparison operators* are used to compare two values and return TRUE or FALSE depending on the validity of the comparison. Comparison operators include:

- identical (===)
- not identical (!==)
- greater than (>)
- less than (<)
- greater than or equal (>=)
- less than or equal (<=)

```
// Comparison operators
1 > 3; // FALSE
3 > 1; // TRUE
250 >= 250; // TRUE
1 === 1; // TRUE
1 === 2; // FALSE
1 === "1"; // FALSE
```

PHP If Statements

PHP if statements evaluate a boolean value or expression and execute the provided code block if the expression evaluates to TRUE.

```
if (TRUE) {
    echo "TRUE is always true";
}

$condition1 = TRUE;
if ($condition1) {
    // This code block will execute
}

$condition2 = FALSE;
if ($condition2) {
    // This code block will not execute
}
```

PHP switch statement

PHP `switch` statements provide a clear syntax for a series of comparisons in which a value or expression is compared to many possible matches and code blocks are executed based on the matching `case`.

In PHP, once a matched `case` is encountered, the code blocks of all subsequent cases (regardless of match) will be executed until a `return`, `break`, or the end of the statement is reached. This is known as *fall through*.

```
switch ($letter_grade) {
    case "A":
        echo "Terrific";
        break;
    case "B":
        echo "Good";
        break;
    case "C":
        echo "Fair";
        break;
    case "D":
        echo "Needs Improvement";
        break;
    case "F":
        echo "See me!";
        break;
    default:
        echo "Invalid grade";
}
```

PHP readline()

The PHP built-in `readline()` function takes a string with which to prompt the user. It waits for the user to enter text into the terminal and returns that value as a string.

```
echo "\nWhat's your name?\n";
$name = readline(">> "); // receives user
input
```

PHP elseif statements

PHP `elseif` statements must be paired with an `if` statement, but many `elseif`s can be chained from a single `if`.

`elseif`s provide an additional condition to check (and corresponding code to execute) if the conditional statements of the `if` block and any preceding `elseif`s are not met.

```
$fav_fruit = "orange";

if ($fav_fruit === "banana"){
    echo "Enjoy the banana!";
} elseif ($fav_fruit === "apple"){
    echo "Enjoy the apple!";
} elseif ($fav_fruit === "orange"){
    echo "Enjoy the orange!";
} else {
    echo "Enjoy the fruit!";
}

// Prints: Enjoy the orange!
```

PHP Truthy and Falsy

PHP values within a condition will always be evaluated to `TRUE` or `FALSE`. Values that will evaluate to `TRUE` are known as *truthy* and values that evaluate to `FALSE` are known as *falsy*.

Falsy values include:

- `false`
- `0`
- empty strings
- `null`
- `undefined`
- `NaN`.

All other values are *truthy*.

```
if ("What's going on?"){ // evaluates
to TRUE
    echo "Let us explain...";
}
// Prints: Let us explain...
```

PHP Boolean Values

PHP Boolean values are either `TRUE` or `FALSE`, which are the only members of the `boolean` type

```
// booleans
$is_true = TRUE;
$is_false = FALSE;

echo gettype($is_true);
// Prints: boolean
echo gettype($is_false);
// Prints: boolean
```

PHP ternary operator

In PHP, the ternary operator allows for a compact syntax in the case of binary (`if/else`) decisions. It evaluates a single condition and executes one expression and returns its value if the condition is met and the second expression otherwise.

The syntax for the ternary operator looks like the following:

`condition ? expression1 : expression2`

```
// Without ternary
$isClicked = FALSE;
if ($isClicked) {
    $link_color = "purple";
} else {
    $link_color = "blue";
}
// $link_color = "blue";
```

```
// With ternary
$isClicked = FALSE;
$link_color = $isClicked ? "purple" :
"blue";
// $link_color = "blue";
```

