Examining conditions

Conditional operator

The conditional operator **?:** is also known as the "ternary" operator as it has three components. This operator first evaluates an expression for a **TRUE** or **FALSE** Boolean value, then returns one of two specified results depending on the evaluation. The conditional operator syntax looks like this:

(*test-expression* **) ?** *result-if-true* **:** *result-if-false* **;**

The conditional operator can be used to evaluate whether a given number is one or more, to ensure correct grammar in output regarding singular and plural items. This avoids awkward phrases such as "There is 5":

```
$verb = ( $number == 1 ) ? 'is' : 'are';
echo "There $verb $number" ;
```

In this case, when the **$number** variable has a value of one, the **'is'** result will be assigned to the **$verb** variable, otherwise the **'are'** result will be assigned.

The conditional operator can also be used to evaluate whether a given number is odd or even ("parity") by examining if there is any remainder after dividing the number by two, then assigning an appropriate string result, like this:

```
$parity = ( $number % 2 != 0 ) ? 'Odd' : 'Even' ;
echo "$number is $parity" ;
```

In this case, when the modulus operation returns a value of one, the **'Odd'** result will be assigned to the **$parity** variable, otherwise the **'Even'** result will be assigned.

Null coalescing operator

PHP has a special **NULL** value that is a built-in constant, which represents a variable with no value whatsoever – not even zero. Variables that have not been assigned a value will evaluate as **NULL**. The snappily named **??** "null coalescing" operator can be used to traverse a number of operands, from left to right, and return the value of the first operand that is not **NULL**. If none of the operands have a value (and are not **NULL**) then the null coalescing operator will itself return a **NULL** result.

Beware

Do not use more than one **?:** conditional operator in a single statement as the results may be unpredictable.