# Tutorial 08 –Conditional Statements

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## PHP – Conditional Statements

- Very often when you write code, you want to perform different actions for different decisions.
- You can use conditional statements in your code to do this.
- In PHP we have the following conditional statements:
    - if statement - use this statement to execute some code only if a specified condition is true
    - if...else statement - use this statement to execute some code if a condition is true and another code if the condition is false
    - if...elseif....else statement - use this statement to select one of several blocks of code to be executed

| Example (php02_01_if.php) | Explanation |
|---|---|
| ```php<br><?php<br>  $d=date("D");<br>  if ($d=="Fri")<br>    echo "Have a nice weekend!";<br>?><br>``` | The following example will output "Have a nice weekend!" if the current day is Friday: |

## date function

**Description**

```
string date ( string $format [, int $timestamp = time() ] )
```

Returns a string formatted according to the given format string using the given integer **timestamp** or the current time if no timestamp is given. In other words, **timestamp** is optional and defaults to the value of time().

**Parameters**

**format**

The format of the outputted date string. See the formatting options below. There are also several predefined date constants that may be used instead, so for example **DATE_RSS** contains the format string 'D, d M Y H:i:s'.

**The following characters are recognized in the format parameter string**

| format character | Description | Example returned values |
|---|---|---|
| Day | --- | --- |
| d | Day of the month, 2 digits with leading zeros | 01 to 31 |
| D | A textual representation of a day, three letters | Mon through Sun |

## Curly braces – statement blocks

- If more than one line should be executed if a condition is true/false, the lines should be enclosed within curly braces:

**Example (php02_02_if.php)**

```php
<?php
  $d=date("D");
  if ($d=="Fri") {
    echo "Hello!<br />";
    echo "Have a nice weekend!";
    echo "See you on Monday!";
  }
?>
```

## PHP if-else statement

- If you want to execute some code if a condition is true and another code if a condition is false, use the if…else statement.

| Example (php02_03_ifelse.php) | Explanation |
|---|---|
| ```php
<?php
  $d=date("D");
  if ($d=="Fri")
    echo "Have a nice weekend!";
  else
    echo "Have a nice day!";
?>
``` | The following example will output "Have a nice weekend!" if the current day is Friday, otherwise it will output "Have a nice day!": |

## PHP if-elseif-else statement

- If you want to execute some code if one of several conditions is true, use the elseif statement.

| Example (php02_04_elseif.php) | Explanation |
|---|---|
| ```php
<?php
  $d=date("D");
  if ($d=="Fri")
    echo "Have a nice weekend!";
  elseif ($d=="Sun")
    echo "Have a nice Sunday!";
  else
    echo "Have a nice day!";
?>
``` | The following example will output "Have a nice weekend!" if the current day is Friday, and "Have a nice Sunday!" if the current day is Sunday. Otherwise, it will output "Have a nice day!" |

## Logical Operators

| Operator | Description | Example (x=6; y=3) |
|---|---|---|
| && | And | (x < 10 && y > 1) returns true |
| \|\| | Or | (x==5 \|\| y==5) returns false |
| ! | Not | !(x==y) returns true |

## And Logical Operator

- If condition A is true, condition B is true, then condition A and condition B is true.
- If either condition A or condition B is false, then condition A and condition B is false.

| Example (php02_05_and.php) | Explanation |
|---|---|
| ```php<br><?php<br>  $CW_marks = 40;<br>  $Exam_marks = 58;<br>  if ($CW_marks >= 40 && $Exam_marks > = 50)<br>    echo "Passed!";<br>  else<br>    echo "Failed!";<br>?><br>``` | The following example will output "Passed!" if both conditions are true, otherwise it will output "Failed!": |

## Or Logical Operator

- If condition A is false, condition B is false, then condition A or condition B is false.
- If either condition A or condition B is true, then condition A or condition B is true.

| Example (php02_06_or.php) | Explanation |
|---|---|
| ```php<br><?php<br>  $CW_marks = 28;<br>  $Exam_marks = 58;<br>  if ($CW_marks >= 40 || $Exam_marks > = 50)<br>    echo "Passed!";<br>  else<br>    echo "Failed!";<br>?><br>``` | The following example will output "Passed!" if either one condition is true, otherwise it will output "Failed!": |

**Create a PHP if…else statement and test it with a Web server**

1.  Use a text editor (e.g. Notepad) to type the following. Save the file with name
    **SEHH1016_T8_ex.php**, and put it in the **root directory** of your Apache Web server. It
    should be the "htdocs" folder by default.

```
<HTML>
      <BODY>
          <P> Second exercise: </P>

          <?php
                $numA = 2;
                $txtA = "2";

                if ($numA == $txtA)
                {
                      echo "True";
                }
                else
                {
                      echo "False";
                }
          ?>

      </BODY>
</HTML>
```

2.  Save the file and view the result through the web server. Are "numA" and "txtA" equal?

3.  Create two more variables: $numB and $txtB. Set $numB as 12, $txtB as "12". Test the
    following comparison:
    (a)  $numA > $numB: _____
    (b)  $txtA > $txtB: _____
    (c)  $numA > $txtB: _____
    (d)  $txtA > $numB: _____

4.  Create another variable $numC. Set the value of $numC with the following. What is the
    result when "echo $numC" is executed?
    (a) $numA * $numB: _____
    (b) $txtA + $txtB: _____
    (c) $numA . $numB: _____
    (d) $txtA . $txtB: _____