# Homework: PHP Introduction

This document defines homework assignments from the [“PHP & MySQL“ Course @ Software University](https://softuni.bg/trainings/fasttracks/details/1033). Please submit as homework a single zip / 7z archive holding the solutions (source code) of all below described problems.

## Print current date

Try to find date time function and print with echo or print functions current date.

## Type of variable

Declare all possible types of variable and then, print their types with echo. You can use function gettype() that return type of given variable.

## Rectangle Area

Write a program that enters the **sides of a rectangle** (two integers **a** and **b**) and calculates and prints the rectangle's area. Examples:

|  |  |
| --- | --- |
| **Input** | **Output** |
| 7 20 | 140 |
| 5 12 | 60 |

## Triangle Area

Write a program that enters 3 points in the plane (as integer **x** and **y** coordinates), calculates and prints the **area of the triangle** composed by these 3 points. Round the result to a whole number. In case the three points do not form a triangle, print "**0**" as result. Examples:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| -5 10  25 30  60 15 | 575 | 53 18  56 23  24 27 | 86 | 1 1  2 2  3 3 | 0 |

This resource could help you: <http://www.mathopenref.com/coordtrianglearea.html>.

## Boolean Variable

Declare a Boolean variable called isFemale and assign an appropriate value corresponding to **your gender**. Print it on the web page.

## Quotes in Strings

Declare two string variables and assign them with following value:

|  |
| --- |
| I asked a girl out and she said – “I don't know”. Does she mean yes or no? |

Do the above in two different ways: with and without using **quoted strings**. Print the variables to ensure that their value was correctly defined.

## Type Casting

You can pretend that a variable or value is of a different type by using a type cast. Try to cast floating point number to integer and then print it on the web page.

## Print Html

Try to print html tags as text. Use build in functions in PHP. Example:

|  |  |
| --- | --- |
| **Input** | **Output** |
| <h1>Hello World</h1> | <h1>Hello World</h1> |
| <p>I love Software University<p> | <p>I love Software University<p> |

This resource could help you: <http://php.net/manual/en/function.strip-tags.php>

## \*Divide by 2 and 9

Write a Boolean expression that checks for given integer if it can be **divided** (without remainder) **by 7 and 5 in the same time**. Examples:

|  |  |
| --- | --- |
| **n** | **Divided by 7 and 5?** |
| 17 | false |
| 0 | false |
| 10 | false |
| 7 | false |
| 18 | true |
| 72 | true |

## \*Third Digit is 7?

Write **an expression** that checks for given integer **if its third digit** from right-to-left **is 7**. Examples:

|  |  |
| --- | --- |
| **n** | **Third digit 7?** |
| 5 | false |
| **7**01 | true |
| 9**7**03 | true |
| **8**77 | false |
| 777**8**77 | false |
| 9999**7**99 | true |

## \*\*Numbers from 1 to n

Write a program that reads an integer number **n** from the input and prints all the numbers in the interval [**1**..**n**], each on a single line. Note that you may need to use a for-loop. Examples:

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **numbers** | **sum** |  | **numbers** | **sum** |  | **numbers** | **sum** |
| 3 | 1  2  3 | 5 | 1  2  3  4  5 | 1 | 1 |

This resource could help you: <http://www.homeandlearn.co.uk/php/php4p6.html>

## \*\*\*Fibonacci Numbers

Write a program that reads a number n and prints on the web page the first n members of the [**Fibonacci sequence**](http://en.wikipedia.org/wiki/Fibonacci_number) (at a single line, separated by spaces) : 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, …. Note that you may need to learn how to use loops. Examples:

|  |  |
| --- | --- |
| **n** | **comments** |
| 1 | 0 |
| 3 | 0 1 1 |
| 10 | 0 1 1 2 3 5 8 13 21 34 |