

Lab 3-2. Functions

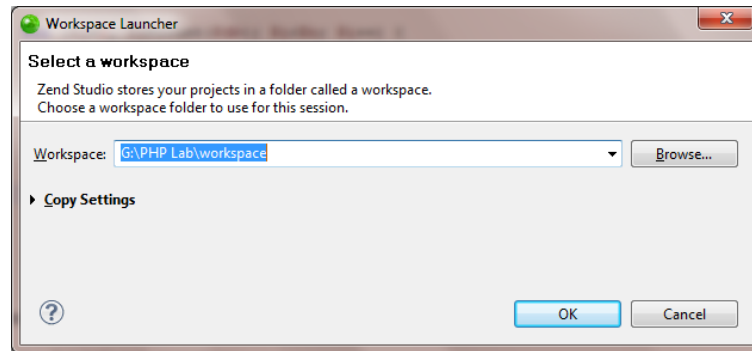
Prepared: TrangNTT

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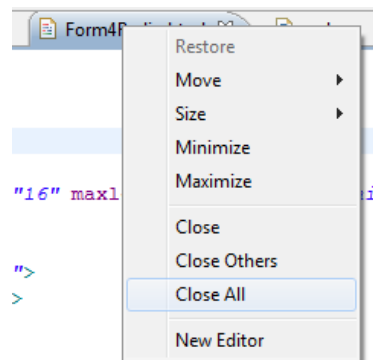
2.1. Create a PHP project

Step 1. Open Zend Studio 7.0

- Select Start → All Programs → Zend Studio – 7.0.0 → Zend Studio – 7.0.0
- Choose OK to confirm the workspace.



- There should be a project named Lab3 as the result of the previous lab.
- Close all the opening file in the **PHP Editor** view by right click to a file and choose **Close All**.



2.2. Guess Heads Or Tails

Step 1. Create HeadsOrTails.php

```
1 <HTML>
2   <HEAD><TITLE> Coin Flip!</TITLE>
3   <BODY>
4     <FONT SIZE=4 COLOR="BLUE"> Please Pick Heads or Tails! </FONT>
5
6     <FORM ACTION="GotFlip.php" METHOD="POST">
7       <?php
8         print "<INPUT TYPE=\"radio\" NAME=\"pick\" VALUE=0 > Heads";
9         print "<INPUT TYPE=\"radio\" NAME=\"pick\" VALUE=1 > Tails";
10        print "<BR>";
11      <?>
12      <INPUT TYPE="SUBMIT" VALUE="Submit">
13      <INPUT TYPE="RESET" VALUE="Restart">
14
15    </FORM>
16  </BODY>
17 </HTML>
```


Step 2. Create GotFlip.php

```
HeadsOrTails.php  GotFlip.php X
1 <html>
2 <head><title> Coin Flip Results </title></head>
3 <body>
4     <?php
5         srand ((double) microtime() * 10000000);
6         $flip = rand( 0, 1 );
7         $pick = $_POST["pick"];
8
9         if ( $flip == 0 && $pick == 0 ) {
10             print "The flip=$flip, which is heads! <br> ";
11             print '<font color="blue"> You got it right!</font>';
12         } elseif ( $flip == 0 && $pick == 1 ) {
13             print "The flip=$flip, which is heads! <br> ";
14             print '<font color="red"> You got it wrong!</font>';
15         } elseif ( $flip == 1 && $pick == 1 ) {
16             print "The flip=$flip, which is tails! <br> ";
17             print '<font color="blue"> You got it right!</font>';
18         } elseif ( $flip == 1 && $pick == 0 ) {
19             print "The flip=$flip, which is tails! <br> ";
20             print '<font color="red"> You got it wrong!</font>';
21         } else {
22             print "<br>Illegal state error!";
23         }
24     ?>
25 </body></html>
```

Step 3. Run the ConditionalTest.html

Please Pick Heads or Tails!

☒ Heads ☐ Tails



The flip=0, which is heads!
You got it right!

2.3. Guess a number

Create a GuessANumber.php file to process a game which allows users to guess a number from 0 to 100.

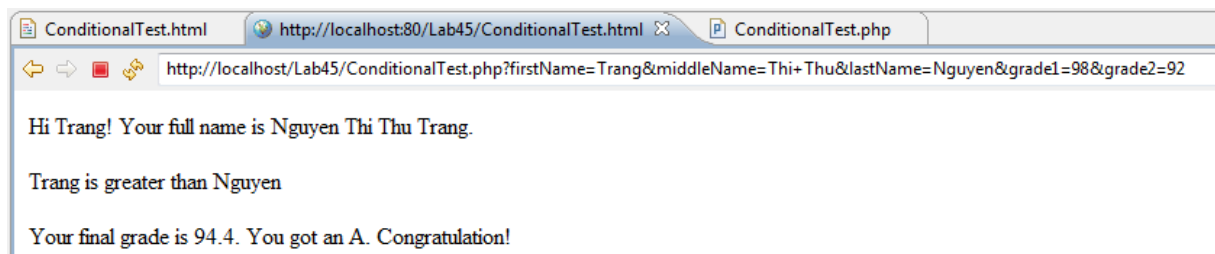
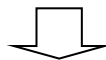
The system first get a random number from 0 to 100. Then the system ask the user to enter a number, if the number the user guesses is less than the random number, notify "Wrong. Please try a higher number. You have guessed 1 time!". Otherwise, notify "Wrong. Please try a lower number. You have guessed 1 time!". Then the user enter another number, so on...

Note to validate the number the user entered (text box). If it is not a number, please notify "You must enter a number!".

2.4. Using printf function

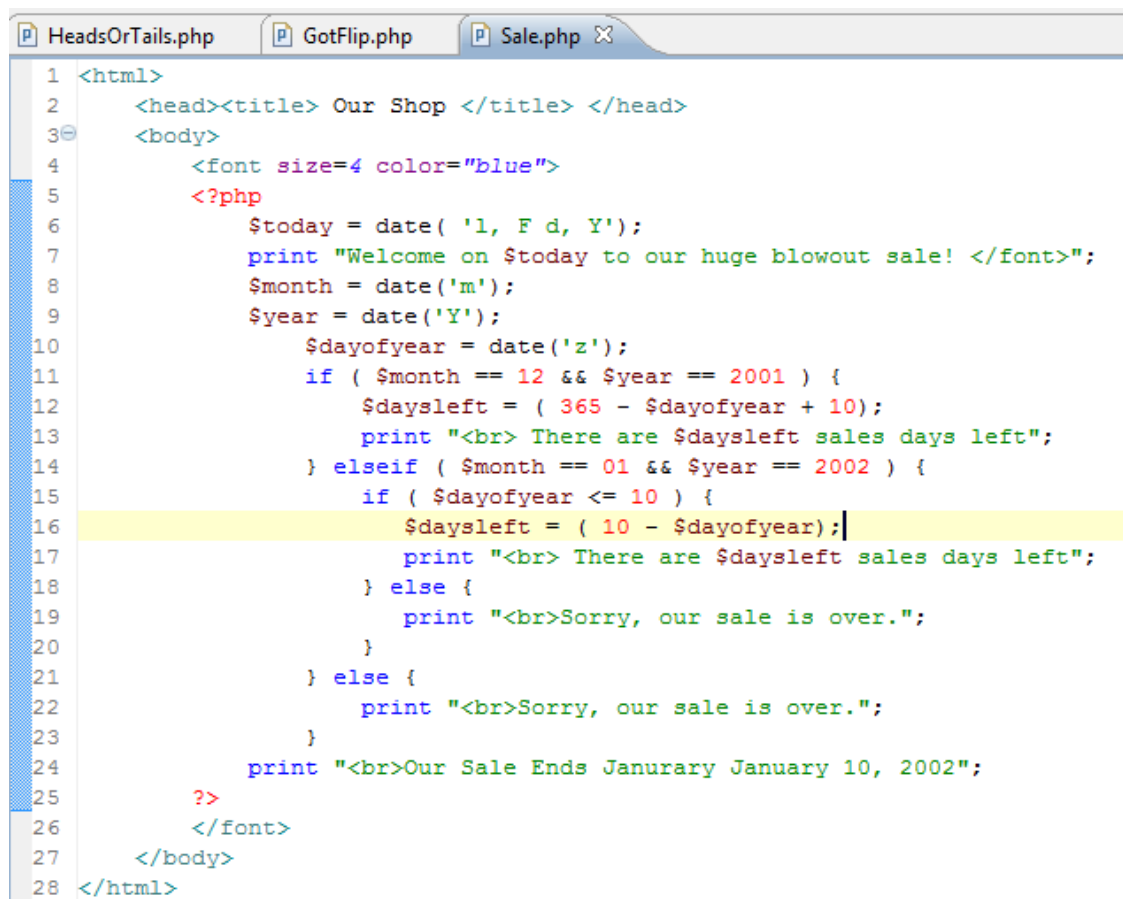
Change the following part to ConditionalTest.php in Lab4. Run and observe the result.

```
20 if ($final > 89) {
21     printf ("Your final grade is %.1f. You got an A. Congratulation!", $final);
22 } elseif ($final > 79) {
23     printf ("Your final grade is %.1f. You got an B.", $final);
24 } elseif ($final > 69) {
25     printf ("Your final grade is %.1f. You got an C.", $final);
26 } elseif ($final > 59) {
27     printf ("Your final grade is %.1f. You got an D", $final);
28 } elseif ($final >= 0) {
29     printf ("Your final grade is %.1f. You got an F.", $final);
30 } else {
31     printf ("Illegal grade less than 0. Final grade = %.1f", $final);
32 }
33 ?></body></html>
```



2.5. Sale

Create Sale.php to give date information for sale.



2.6. CarpetEstimate

Step 1. Create CarpetEstimate.html

```
1 <HTML>
2   <HEAD><TITLE> Carpet Estimate</TITLE></HEAD>
3   <BODY>
4     <FONT SIZE=5 COLOR="BLUE"> Carpet Cost Estimator! </FONT>
5     <FORM ACTION="CalculateCost.php" METHOD="POST">
6       <table>
7         <tr><td>Carpet grade:</td>
8           <td><INPUT TYPE="radio" NAME="grade" VALUE=1 > Best Quality</td>
9           <td><INPUT TYPE="radio" NAME="grade" VALUE=2 > Extra Value</td>
10        </tr>
11        <tr>
12          <td>Room width (in m2):</td>
13          <td colspan="2"><INPUT TYPE="text" NAME="width" SIZE=4 MAXLENGTH=4></td>
14        </tr>
15        <tr>
16          <td>Room length (in m2):</td>
17          <td colspan="2"><INPUT TYPE="text" NAME="length" SIZE=4 MAXLENGTH=4></td>
18        </tr>
19        <td align="right"> <INPUT TYPE="SUBMIT" VALUE="Submit"></td>
20        <td align="left"><INPUT TYPE="RESET" VALUE="Reset"></td>
21      </tr>
22    </table>
23  </FORM>
24 </BODY>
25 </HTML>
```

Step 2. Create CalculateCost.php

```
1 <head><title> Carpet Cost Quote </title> </head>
2 <body>
3   <font size=5 color="blue"> Your Estimated Carpet Costs </font>
4   <?php
5     function carpet_cost( $width, $length, $grade, $carpet_cost ) {
6       if ( $width > 0 && $length > 0 ) {
7         if ( $grade == 1 ) {
8           $carpet_cost = $width * $length * 4.99;
9           return 1;
10        } elseif ( $grade == 2 ) {
11          $carpet_cost = $width * $length * 3.99;
12          return 1;
13        } else {
14          print "Unknown carpet grade = $grade";
15          return 0;
16        }
17      } else { return 0; }
18    }
19    $width = $_POST["width"]; $length = $_POST["length"]; $grade=$_POST["grade"];
20    $carpet_cost = 0; $install_cost = 0;
21    $ret = carpet_cost( $width, $length, $grade, &$amp;carpet_cost );
22    if ( $ret ) {
23      $room_size = $width * $length;
24      $total_cost = $carpet_cost + ($carpet_cost *.5);
25      print "<br>Total square feet = $room_size";
26      print "<br>Carpet grade = $grade";
27      print "<br>Carpet cost = \\\$carpet_cost";
28      print "<br>Total cost estimate (installed) = \\\$total_cost";
29    } else { print "Illegal value received"; }
30  }
31  <?>
32 </body>
```

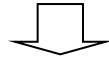
Step 3. Run and observe the result

Carpet Cost Estimator!

Carpet grade: ☐ Best Quality ☒ Extra Value

Room width (in m2):

Room length (in m2):



Your Estimated Carpet Costs

Total square feet = 15

Carpet grade = 2

Carpet cost = \$59.85

Total cost estimate (installed) = \$89.775

2.7. Exercise

1. Write a function to convert radians to degrees and vice versa. Write .php file allowing users to enter 1 factor, and print the other factor.
2. Create a DateTimeFunction.php to do the following jobs:
 - Allows users enter two names and their birthdays in number (E.g. 12/12/2008)
 - Validate them if two birthdays
 - If OK, give the following information by write your own functions and call them
 - Display in two dates in letter (E.g. Friday, December 12, 2008) for each person
 - Calculate the difference in days between two dates.
 - Calculate how old are they, the difference years between two persons.