**ACTIVITY ANSWER SHEET**

|  |  |
| --- | --- |
| Name | Rejan Vincent U. Onting |
| Section: | IT-3R1 |

**Instructions**:

1. Push your output on your GITHUB repository.

2. Use the answer sheet provided save it as PDF file then push it to your GitHub.

3. Answer the ff. problems write it on the answer sheet.

4. Late submissions will no longer be accepted.

5. Caught copying outputs of others will be given sanctions.

6. Failure to follow these instructions will be given sanctions.

**Activity 1: Control Structures**

1. Write down the syntax in PHP for the ff.

|  |  |
| --- | --- |
| 1. if | <?php  $Thou = 1000;  $Hun = 100;  $Ten = 10;  if ($Thou>$Hun) {  echo "True";  }  ?> |
| 2. if…else | <?php  $Thou = 1000;  $Hun = 100;  $Ten = 10;  if ($Thou<$Hun) {  echo "True";  }  else{  echo "False";  }  ?> |
| 3. if…else if…else | <?php  $Thou = 1000;  $Hun = 100;  $Ten = 10;  if ($Thou == $Hun) {  echo "True";  }  elseif ($Hun < $Ten) {  echo "True";  }  else{  echo "Nothing went right";  }  ?> |
| 4. switch…case | <?php  $Thou = 1000;  $Hun = 100;  $Ten = 10;  switch ($Thou) {  case 100:  echo "Wrong";  break;  case 10:  echo "Wrong 2";  break;  case 1000:  echo "Finally";  break;  default:  echo "NONE";  break;  }  ?> |
| 5. for loop | <?php  $fav = 3;  for ($i=0; $i < 5 ; $i++) {  if ($i == 3) {  echo "$i is my favorite number <br>";  }  elseif ($i != 3) {  echo "$i is not my favorite number <br>";  }  }  ?> |
| 6. do while loop | <?php  $i = 0;  do {  echo "$i is not my favorite number <br>";  $i++;  } while ( $i < 7);  if ($i == 7) {  echo "$i is also my favorite number";  }  ?> |
| 7. while loop | <?php  $i = 0;  while ($i < 3) {  echo "$i is not my favorite number!<br>";  $i++;  if ($i == 3) {  echo "$i is my favorite number";  }  }  ?> |
| 8. foreach loop | <?php  $numbers = array(1,2,3,4,5);  foreach ($numbers as $value) {  if ($value == 3) {  echo "$value is my fav <br>";  }  elseif ($value !=3) {  echo "$value <br>";  }  }  ?> |
| 9. break statement | <?php  $numbers = array(1,2,3,4,5,6,7,8,9,10);  foreach ($numbers as $value) {  if ($value == 3) {  echo "$value is my fav <br>";  }  elseif ($value == 7) {  echo "$value is my last fav number";  break;  }  elseif ($value !=3) {  echo "$value <br>";  }  }  ?> |
| 10. continue statement | <?php  $numbers = array(1,2,3,4,5,6,7,8,9,10);  foreach ($numbers as $value) {  if ($value != 7) {  echo "$value is not yet 7 <br>";  continue;  }  else{  echo "$value is 7<br>";  break;  }  }  ?> |
| 11. try…catch | <?php  function checkNum($number){  if($number>1){ #2>1  throw new Exception("Value must be 1 or below");  }  return true;  }  try{  checkNum(2);  echo "If you see this, the number is 1 or below";  }  catch(Exception $e){  echo "Message: " .$e->getMessage();  }  ?> |

2. Solve the ff. problem using PHP.

a. Write a program that checks if value is a number (integer).

Sample input: ‘1’ Sample input: 1

Expected output: Not a number Expected output: A number

|  |
| --- |
| <?php  if (is\_int('1')) {  echo "A number";  }  else {  echo "Not a number";  }  ?> #Not a number |

b. Write a program that checks if a value is positive or negative and odd or even.

Sample input: 0 Sample input: -1

Expected output: Positive & Even Expected output: Negative and Odd

|  |
| --- |
| <?php  $num = 4;  if ($num > 0 && $num%2==1) { //4>0 == true && (4%2=0) == false  echo "Positive and Odd";  }  elseif ($num > 0 && $num%2==0) {  echo "Positive and Even";  }  elseif ($num < 0 && $num%2==-1) {  echo "Negative and Odd";  }  elseif ($num < 0 && $num%2==0) {  echo "Negative and Even";  }  else {  echo "Zero";  }  ?> |

c. Write a program that checks if a value is palindrome.

Sample input: Anna Sample input: Bogart

Expected output: Palindrome Expected output: Not a Palindrome

|  |
| --- |
| <?php  $name = 'anna';  if (strrev($name) == $name) {  echo "Palindrome";  }  else{  echo "$name is Not a Palindrome";  }  ?> |

d. Write a program to calculate and print the factorial of a number using a for loop.

Sample input: 4

Expected output: 24

|  |
| --- |
| <?php  $num = 4;  $fac = 1;  for ($i=$num; $i > 0 ; $i--) { //i=4 ; 4 > 0 ; 4-1=3  $fac = $fac\*$i;  }  echo "$fac";  ?> |

e. Write a PHP program to generate and display the first n lines of a Floyd triangle.

Sample input: 3

Sample output:

1

2 3

4 5 6

|  |
| --- |
| <?php  $num = 1;  for ($i=1; $i <= 3; $i++) {  for ($j=1; $j <= $i; $j++) {  echo "$num " ;  $num++;  if ($j == $i) {  echo "<br>";  }  }  }  ?> |

**Activity 2: PHP Built-in Functions**

Write down the functionalities of the ff. built-in functions in PHP.

|  |  |
| --- | --- |
| Array | An array stores multiple values in one single variable. |
| Calendar | An extension that contains functions that simplifies converting different calendar formats. |
| Date | Allows you to get the date from the server where your PHP script runs. You can also use it to format the date in several ways. |
| Directory | Allows you to retrieve information about directories and their contents. |
| Error | Used to deal with error handling and logging. It also allows you to define own error handling rules, and modify the way the errors can be logged. |
| File System | Allows you to access and manipulate the file system. |
| Filter | Is used to validate and filter data coming from insecure sources, like user input. |
| FTP | Gives client access to file servers through the File Transfer Protocol (FTP). |
| Libxml | The libxml functions and constants are used together with SimpleXML, XSLT and DOM functions. |
| Mail | Allows you to send emails directly from a script. |
| Math | Can handle values within the range of integer and float types. |
| Misc | Affected by settings in the php.ini file. |
| MySQLi | Allows you to access MySQL database servers. |
| Network | Contains various network function and let you manipulate information sent to the browser by the Web server, before any other output has been sent. |
| SimpleXML | An extension that allows us to easily manipulate and get XML data. |
| Stream | A way of generalizing file, network, data compression, and other operations which share a common set of functions and uses. |
| String | A string is a sequence of characters |
| XML Parser | Lets you create XML parsers and define handlers for XML events. |
| Zip | Allows you to read ZIP files. |
| Timezones | Timezones and its format that PHP support to be used. |

**Activity 3: Regular Expression**

1. Define Regular Expression (RegEx) and provide example programming scenario where you can use (RegEx). Provide example syntax in PHP.

* Regular expressions are nothing more than a sequence or pattern of characters itself. They provide the foundation for pattern-matching functionality.
* You can use RegEx when you want to check if a string contains another string, or locating the position of a word in a string and do something about it. Also, to remove special characters or numbers and many more.
* preg\_replace, preg\_match, preg\_split, and etc.

2. Solve the ff. problem using Regular Expressions.

a. Write a PHP script that checks if a string contains another string

Sample String: 'The quick brown fox'

Test input: ‘Fox’

Expected output: Fox is found the string

|  |
| --- |
| <?php  $myString = "The quick brown fox";  if ( strstr( $myString, 'fox' ) ) {  echo "fox is found in the string";  }  else {  echo "Text not found";  }  ?> |

b. Write a PHP script that removes the last word from a string.

Sample String: 'The quick brown fox'

Expected output: ‘The quick brown'

|  |
| --- |
| <?php  $str = "the quick brown fox";  $split = strrpos($str, ' ');  $str = substr($str, 0, $split);  echo "$str";  ?> |

c. Write a PHP script to remove nonnumeric characters except comma and dot.

Sample String: '/$123,34.00A#'

Expected output: 123,34.00

|  |
| --- |
| <?php  $str = '/$123,34.00A#';  echo preg\_replace("/[^0-9,.]/", "", $str);  ?> |

d. Write a PHP script to extract text (within parenthesis) from a string.

Sample String: ‘The quick brown [fox].’

Expected output: Fox

|  |
| --- |
| <?php  $text = 'The quick brown (fox).';  preg\_match('#\((.\*?)\)#', $text,$extract);  print $extract[1];  ?> |

e. Write a PHP script to remove all characters from a string except a-z A-Z 0-9 or " ". Sample String: ‘abcde$ddfd @abcd )der]’

Expected output: abcdeddfd abcd der

|  |
| --- |
| <?php  $str = 'abcde$ddfd @abcd )der]';  $str = preg\_replace("/[^A-Za-z0-9]/", '', $str);  echo "$str";  ?> |

**Activity 4: Error Handling**

1. List down the different PHP errors. Provide example code on how to handle these errors.

a.) Parse error or Syntax error - set\_error\_handler()

b.) Fatal Error - set\_error\_handler()

c.) Warning Errors - set\_error\_handler()

d.) Notice Error - set\_error\_handler()