

ACTIVITY ANSWER SHEET

Name	Lopez, April Ann L.
Section:	BSIT-2R2

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	<pre>if (condition) { code to be executed if condition is true; }</pre>
2. if...else	<pre>if (condition) { code to be executed if condition is true; } else { code to be executed if condition is false; }</pre>
3. if...else if...else	<pre>if (condition) { code to be executed if this condition is true; } elseif (condition) { code to be executed if first condition is false and this condition is true; } else { code to be executed if all conditions are false; }</pre>
4. switch...case	<pre>switch (n) { case label1: code to be executed if n=label1; break; case label2: code to be executed if n=label2; break; case label3: code to be executed if n=label3; break; ... default: code to be executed if n is different from all labels; }</pre>
5. for loop	<pre>for (init counter; test counter; increment counter) { code to be executed for each iteration; }</pre>
6. do while loop	<pre>do { code to be executed; } while (condition is true);</pre>
7. while loop	<pre>while (condition is true) { code to be executed; }</pre>

8. foreach loop	<pre>foreach (\$array as \$value) { code to be executed; }</pre>
9. break statement	<pre>jump statement; break;</pre>
10. continue statement	<pre>jump-statement; continue;</pre>
11. try...catch	<pre><?php //create function with an exception function checkNum(\$number) { if(\$number>1) { throw new Exception("Value must be 1 or below"); } return true; } //trigger exception in a "try" block try { checkNum(2); //If the exception is thrown, this text will not be shown echo 'If you see this, the number is 1 or below'; } //catch exception catch(Exception \$e) { echo 'Message: ' . \$e->getMessage(); } ?></pre>

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 ( (int) '1' !== 1 ) {  
    echo 'not a number';  
} else {  
    echo '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  
function check($number){  
    if($number % 2 == 0){  
        echo "Even ";  
    }  
    else{  
        echo "Odd ";  
    }  
}  
  
function sample($number){  
    if($number >= 0){  
        echo "& Positive";  
    }  
    else{  
        echo "& Negative";  
    }  
}  
  
$number = -1;  
check($number);  
sample($number)  
?>
```

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
function Palindrome($string){
    if (strrev($string) == $string){
        return 1;
    }
    else{
        return 0;
    }
}

// Driver Code
$original = "Anna";
if(Palindrome($original)){
    echo "Palindrome";
}
else {
    echo "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
$n = 4;
$x = 1;
for($i=1;$i<=$n-1;$i++)
{
    $x*=( $i+1);
}
echo "Factorial of $n is = $x"."\\n";
?>
```

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
$n = 3;
echo "sample input = " . $n . "\\n";
$count = 1;
for ($i = $n; $i > 0; $i--)
{
    for ($j = $i; $j < $n + 1; $j++)
    {
        printf("%4s", $count);
        $count++;
    }
    echo "\\n";
}
?>
```

Activity 2: PHP Built-in Functions

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

Array	<div>array() array_change_key_case() array_chunk() array_column() array_combine() array_count_values() array_diff() array_diff_assoc() array_diff_key() array_diff_uassoc() array_diff_ukey() array_fill() array_fill_keys() array_filter() array_flip() array_intersect() array_intersect_assoc() array_intersect_key() array_intersect_uassoc() array_intersect_ukey() array_key_exists() array_keys() array_map() array_merge() array_merge_recursive() array_multisort() array_pad() array_pop() array_product() array_push() array_rand() array_reduce() array_replace() array_replace_recursive() array_reverse() array_search() array_shift() array_slice() array_splice() array_sum() array_udiff() array_udiff_assoc() array_udiff_uassoc() array_uintersect() array_uintersect_assoc() array_uintersect_uassoc() array_unique() array_unshift() array_values() array_walk() array_walk_recursive() arsort() asort() compact() count() current() each() end()</div>
-------	--

	<div>extract() extract() in_array() key() krsort() ksort() list() natcasesort() natsort() next() pos() prev() range() reset() rsort() shuffle() sizeof() sort() uasort() uksort() usort()</div>
Calendar	<div>cal_days_in_month() cal_from_jd() cal_info() cal_to_jd() easter_date() easter_days() frenchtojd() gregoriantojd() jddayofweek() jdmonthname() jdtofrench() jdtogregorian() jdtojewish() jdtojulian() jdtounix() jewishtojd() juliantojd() unixtojd()</div>
Date	<div>checkdate() date_add() date_create_from_format() date_create() date_date_set() date_default_timezone_get() date_default_timezone_set() date_diff() date_format() date_get_last_errors() date_interval_create_from_date_string() date_interval_format() date_isodate_set() date_modify() date_offset_get() date_parse_from_format() date_parse() date_sub() date_sun_info() date_sunrise() date_sunset() date_time_set() date_timestamp_get()</div>

	<div>date_timestamp_set() date_timezone_get() date_timezone_set() date() getdate() gettimeofday() gmdate() gmmktime() gmstrftime() idate() localtime() microtime() mktime() strftime() strtotime() strtotime() time() timezone_abbreviations_list() timezone_identifiers_list() timezone_location_get() timezone_name_from_abbr() timezone_name_get() timezone_offset_get() timezone_open() timezone_transitions_get() timezone_version_get()</div>
Directory	<div>chdir() chroot() closedir() dir() getcwd() opendir() readdir() rewinddir() scandir()</div>
Error	<div>debug_backtrace() debug_print_backtrace() error_clear_last() error_get_last() error_log() error_reporting() restore_error_handler() restore_exception_handler() set_error_handler() set_exception_handler() trigger_error() user_error()</div>
File System	<div>basename() chgrp() chmod() chown() clearstatcache() copy() delete() dirname() disk_free_space() disk_total_space() diskfreespace() fclose() feof() fflush() fgetc()</div>

	fgetcsv() fgets() fgetss() file() file_exists() file_get_contents() file_put_contents() fileatime() filectime() filegroup() fileinode() filemtime() fileowner() fileperms() filesize() filetype() flock() fnmatch() fopen() fpassthru() fputcsv() fputs() fread() fscanf() fseek() fstat() ftell() ftruncate() fwrite() glob() is_dir() is_executable() is_file() is_link() is_readable() is_uploaded_file() is_writable() is_writeable() lchgrp() lchown() link() linkinfo() lstat() mkdir() move_uploaded_file() parse_ini_file() parse_ini_string() pathinfo() pclose() popen() readfile() readlink() realpath() realpath_cache_get() realpath_cache_size() rename() rewind() rmdir() set_file_buffer() stat() symlink() tempnam()
--	--

	<div>tmpfile() touch() umask() unlink()</div>
Filter	<div>filter_has_var() filter_id() filter_input() filter_input_array() filter_list() filter_var() filter_var_array()</div>
FTP	<div>ftp_alloc() ftp_cdup() ftp_chdir() ftp_chmod() ftp_close() ftp_connect() ftp_delete() ftp_exec() ftp_fget() ftp_fput() ftp_get() ftp_get_option() ftp_login() ftp_mdtm() ftp_mkdir() ftp_mlsd() ftp_nb_continue() ftp_nb_fget() ftp_nb_fput() ftp_nb_get() ftp_nb_put() ftp_nlist() ftp_pasv() ftp_put() ftp_pwd() ftp_quit() ftp_raw() ftp_rawlist() ftp_rename() ftp_rmdir() ftp_set_option() ftp_site() ftp_size() ftp_ssl_connect() ftp_systype()</div>
Libxml	<div>libxml_clear_errors() libxml_disable_entity_loader() libxml_get_errors() libxml_get_last_error() libxml_set_external_entity_loader() libxml_set_streams_context() libxml_use_internal_errors()</div>
Mail	<div>ezmlm_hash() mail()</div>
Math	<div>abs() acos() acosh() asin() asinh() atan()</div>

	<div>atan2() atanh() base_convert() bindec() ceil() cos() cosh() decbin() dechex() decoct() deg2rad() exp() expm1() floor() fmod() getrandmax() hexdec() hypot() intdiv() is_finite() is_infinite() is_nan() lcg_value() log() log10() log1p() max() min() mt_getrandmax() mt_rand() mt_srand() octdec() pi() pow() rad2deg() rand() round() sin() sinh() sqrt() srand() tan() tanh()</div>
Misc	<div>connection_aborted() connection_status() connection_timeout() constant() define() defined() die() eval() exit() get_browser() __halt_compiler() highlight_file() highlight_string() hrtime() ignore_user_abort() pack() php_strip_whitespace() show_source() sleep()</div>

	<div>sys_getloadavg() time_nanosleep() time_sleep_until() uniqid() unpack() usleep()</div>
MySQLi	<div>affected_rows() autocommit() begin_transaction() change_user() character_set_name() close() commit() connect() connect_errno() connect_error() data_seek() debug() dump_debug_info() errno() error() error_list() fetch_all() fetch_array() fetch_assoc() fetch_field() fetch_field_direct() fetch_fields() fetch_lengths() fetch_object() fetch_row() field_count() field_seek() get_charset() get_client_info() get_client_stats() get_client_version() get_connection_stats() get_host_info() get_proto_info() get_server_info() get_server_version() info() init() insert_id() kill() more_results() multi_query() next_result() options() ping() poll() prepare() query() real_connect() real_escape_string() real_query() reap_async_query() refresh() rollback() select_db() set_charset()</div>

	<div>set_local_infile_default() set_local_infile_handler() sqlstate() ssl_set() stat() stmt_init() store_result() thread_id() thread_safe() use_result() warning_count()</div>
Network	<div>checkdnsrr() closelog() define_syslog_variables() dns_check_record() dns_get_mx() dns_get_record() fsockopen() gethostbyaddr() gethostbyname() gethostbyname_l() gethostname() getmxrr() getprotobyname() getprotobynumber() getservbyname() getservbyport() header_register_callback() header_remove() header() headers_list() headers_sent() http_response_code() inet_ntop() inet_pton() ip2long() long2ip() openlog() pfsockopen() setcookie() setrawcookie() socket_get_status() socket_set_blocking() socket_set_timeout() syslog()</div>
SimpleXML	<div>_construct() _toString() addAttribute() addChild() asXML() attributes() children() count() getDocNamespaces() getName() getNamespaces() registerXPathNamespace() saveXML() simplexml_import_dom() simplexml_load_file() simplexml_load_string() xpath()</div>

	<div>current() getChildren() hasChildren() key() next() rewind()</div>
Stream	<div>set_socket_blocking() stream_bucket_prepend() stream_context_create() stream_context_get_default() stream_context_get_options() stream_context_get_params() stream_context_set_default() stream_context_set_options() stream_context_set_params() stream_copy_to_stream() stream_filter_append() stream_filter_prepend() stream_filter_register() stream_filter_remove() stream_get_contents() stream_get_filters() stream_get_line() stream_get_meta_data() stream_get_transports() stream_get_wrappers() stream_is_local() stream_isatty() stream_notification_callback() stream_register_wrapper() stream_resolve_include_path() stream_select() stream_set_blocking() stream_set_chunk_size() stream_set_read_buffer() stream_set_timeout() stream_set_write_buffer() stream_socket_accept() stream_socket_client() stream_socket_enable_crypto() stream_socket_get_name() stream_socket_pair() stream_socket_recvfrom() stream_socket_sendto() stream_socket_server() stream_socket_shutdown() stream_supports_lock() stream_wrapper_register() stream_wrapper_restore() stream_wrapper_unregister()</div>
String	<div>addcslashes() addslashes() bin2hex() chop() chr() chunk_split() convert_cyr_string() convert_uuencode() convert_uuencode() count_chars() crc32() crypt()</div>

	<div>echo() explode() fprintf() get_html_translation_table() hebreve() hebrevc() hex2bin() html_entity_decode() htmlentities() htmlspecialchars_decode() htmlspecialchars() implode() join() lcfirst() levenshtein() localeconv() ltrim() md5() md5_file() metaphone() money_format() nl_langinfo() nl2br() Inserts number_format() ord() parse_str() print() printf() quoted_printable_decode() quoted_printable_encode() quotemeta() rtrim() setlocale() sha1() sha1_file() similar_text() soundex() sprintf() sscanf() str_getcsv() str_ireplace() str_pad() str_repeat() str_replace() str_rot13() str_shuffle() str_split() str_word_count() strcasecmp() strchr() strcmp() strcoll() strcspn() strip_tags() stripslashes() stripslashes() stripos() stristr() strlen() strnatcasecmp() strnatcmp() strncasecmp()</div>
--	--

	<div>strncmp() strpbrk() strpos() strchr() strrev() stripos() strrpos() strspn() strstr() strtok() strtolower() strtoupper() strtr() substr() substr_compare() substr_count() substr_replace() trim() ucfirst() ucwords() vfprintf() vprintf() vsprintf() wordwrap()</div>
XML Parser	<div>utf8_decode() utf8_encode() xml_error_string() xml_get_current_byte_index() xml_get_current_column_number() xml_get_current_line_number() xml_get_error_code() xml_parse() xml_parse_into_struct() xml_parser_create_ns() xml_parser_create() xml_parser_free() xml_parser_get_option() xml_parser_set_option() xml_set_character_data_handler() xml_set_default_handler() xml_set_element_handler() xml_set_external_entity_ref_handler() xml_set_notation_decl_handler() xml_set_object() xml_set_processing_instruction_handler() xml_set_start_namespace_decl_handler() xml_set_unparsed_entity_decl_handler()</div>
Zip	<div>zip_close() zip_entry_close() zip_entry_compressedsize() zip_entry_compressionmethod() zip_entry_filesize() zip_entry_name() zip_entry_open() zip_entry_read() zip_open() zip_read()</div>
Timezones	<div>DateTimeZone::__construct DateTimeZone::getLocation DateTimeZone::getName DateTimeZone::getOffset DateTimeZone::getTransitions</div>

	DateTimeZone::listAbbreviations DateTimeZone::listIdentifiers
--	--

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 commonly known as a regex (regexes) are a sequence of characters describing a special search pattern in the form of text string. They are basically used in programming world algorithms for matching some loosely defined patterns to achieve some relevant tasks. Sometimes regexes are understood as a mini programming language with a pattern notation which allows the users to parse text strings. The exact sequence of characters are unpredictable beforehand, so the regex helps in fetching the required strings based on a pattern definition.

```
<?php

// the string to match against
$string = 'The cat sat on the mat';

// match the beginning of the string
echo preg_match("/^The/", $string);

// match the end of the string
echo preg_match("/mat\\z/", $string); // returns 1

// match anywhere in the string
echo preg_match("/dog/", $string); // returns 0 as no match was found for dog.
?>
```

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
$str1 = 'The quick brown fox.';
if (strpos($str1,'fox') !== false)
{
    echo 'Fox is found the string.';
}
else
{
    echo 'Fox is not found as string.';
}
?>
```

- 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
$str1 = 'The quick brown fox';
echo preg_replace('/\W\w+\s*(\W*)$/','',$str1)."\n";
?>
```

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

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

Expected output: 123,34.00

```
<?php
$str1 = "/$123,34.00A#";
echo preg_replace("/[^0-9,.]/", "", $str1)."\n";
?>
```

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

Sample String: 'The quick brown [fox].'

Expected output: Fox

```
<?php
$my_text = 'The quick brown [fox].';
preg_match('#\[.*?\]#', $my_text, $match);
print $match[1]."\n";
?>
```

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: abcdeddfdf abcd der

```
<?php
$string = 'abcde$ddfd @abcd )der';
$newstr = preg_replace("/[^A-Za-z0-9 ]/", "", $string);
echo ".$newstr.\n";
?>
```

Activity 4: Error Handling

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

Parse error or Syntax Error

```
<?php
$x = "geeks";
y = "Computer science";
echo $x;
echo $y;
?>
```

PHP Parse error: syntax error, unexpected '='
in /home/18cb2875ac563160a6120819bab084c8.php on line 3

Fatal Error

```
<?php

function add($x, $y)
{
    $sum = $x + $y;
    echo "sum = " . $sum;
}
$x = 0;
$y = 20;
add($x, $y);

diff($x, $y);
?>
```

PHP Fatal error: Uncaught Error:
Call to undefined function diff()
in /home/36db1ad4634ff7deb7f7347a4ac14d3a.php:12

Stack trace:

#0 {main}
thrown in /home/36db1ad4634ff7deb7f7347a4ac14d3a.php on line 12

Warning Errors

```
<?php
```

```
$x = "GeeksforGeeks";
```

```
include ("gfg.php");
```

```
echo $x . "Computer science portal";
```

```
?>
```

PHP Warning: include(gfg.php): failed to open stream: No such file or directory in /home/aed0ed3b35fece41022f332aba5c9b45.php on line 5
PHP Warning: include(): Failed opening 'gfg.php' for inclusion (include_path='.:usr/share/php') in /home/aed0ed3b35fece41022f332aba5c9b45.php on line 5

Notice Error

```
<?php
```

```
$x = "GeeksforGeeks";
```

```
echo $x;
```

```
echo $geeks;
```

```
?>
```

PHP Notice: Undefined variable: geeks in /home/84c47fe936e1068b69fb834508d59689.php on line 5

