


Assignment no :- 08

Topics covered :-

- PHP
- PHP variable
- PHP function
- PHP operator

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Evaluation Criteria	Marks (out of 3)	Date	Signature of Instructor
Punctuality	03	20/10/2022	
Problem solving technique	03		
Attainment level (out of 3)	03		



## PHP

Q. 1) Explain the what is PHP. List feature of PHP along with one PHP small program.

⇒ PHP

"PHP is open source, interpreted, and Object-oriented scripting programming language that can be executed on server side."

- PHP well suited for web development
- PHP stands for Hypertext Preprocessor
- PHP is interpreted language. i.e. there is no need for compilation.
- PHP is faster than other scripting language, for ex. ASP and JSP
- PHP is Server-side scripting language, which used to manage the dynamic content of website.
- PHP is Open-source scripting language
- PHP is Simple and easy to learn language.

## What is PHP file

- PHP file can contain text, HTML, CSS, JavaScript, and PHP code
- PHP code is executed on server and the result is returned to browser as plain HTML
- PHP files have extension ".php".

## What can do PHP?

- PHP can generate dynamic web page content
- PHP can read, write, open, create, delete and close file on the server
- PHP collect data



- PHP Can add, delete, modify data in your database
- PHP Can encrypt data.

## • Feature

PHP is very popular language because of its simplicity & open source. There are some important features of PHP given below:

- Performance :- PHP script is executed much faster than those script which are written in other language such as JSP & ASP.
- Open Source :- PHP source code are freely available on the web.
- familiarity with syntax :- PHP has easily understandable syntax.
- Embeddable :- PHP code can be easily embedded within HTML tags & script.
- Platform independent :- PHP is available for windows, MAC, LINUX, UNIX OS.
- Database support :- PHP supports all the leading database such as MySQL, SQLite, ODBC, etc.
- Security :- PHP is secure language to develop the website.

## # PHP program

```

<DOCTYPE>
<html>
<body>

<? PHP
echo "<h2> Hello PHP </h2>"
<? PHP >>
</body>
</html>

```



Q. 2) Derive the different <sup>Datatype</sup> type of ~~data~~ <sup>data</sup> in function of PHP

### PHP data type

- PHP data types are used to hold different type of data or values.
- PHP support 8 primitive data type can be categorized further 3 type

- ① Scalar type [ predefined ]
- ② Compound type [ User-defined ]
- ③ Special type [ ]

#### ① Scalar type :-

It hold only single value. There are 4 scalar type of ~~data~~ <sup>data</sup> in PHP.

- ① Boolean
- ② integer
- ③ String
- ④ float

#### ② Compound type :-

It can hold multiple value. There are 2 <sup>compound</sup> ~~scalar~~ data type in PHP

- ① Array
- ② Object

#### ③ Special type :-

There are 2 special type in PHP.

- ① resource
- ② NULL



## PHP String

- A string is a non-numeric data type.
- It holds letter or any alphabet, number and even special characters.
- String value must be enclosed either within 'single quotes' or 'double quotes'.

Ex <? PHP

```
$x = "Hello world";
```

```
$y = "Hello PHP"
```

```
echo $x;
```

```
<br>
```

```
echo $y;
```

```
?>
```

## PHP Integer

Integer means numeric data with or a negative or positive sign, it holds any whole number i.e. whole No. without fractional part or decimal point.

### Rules of Integer

- ① An integer can be either positive or negative.
- ② An integer must not contain decimal point.
- ③ Integer can be decimal, octal, hexadecimal.
- ④ Range is  $2^{31}$  to  $2^{31}$ .

In PHP `var_dump()` function returns data type value.

Ex

<? PHP

```
$x = 80
```

```
var_dump($x);
```

```
?>
```

Output: int(80)



## PHP float :-

- A floating point number is a number with a decimal point.
- It holds number with a fractional or decimal point, including negative or positive sign.

<?PHP

\$x = 10.35

var\_dump(\$x);

?>

Output: float(10.35)

## PHP Boolean

- Boolean is the simplest data type work like switch. It
- It holds only two values TRUE (1) OR FALSE (0).
- It often used with conditional statement. If the condition is correct, return TRUE otherwise FALSE.

Ex <?PHP

if (TRUE):

echo "This condition is TRUE";

elseif (FALSE):

echo "This condition is FALSE";

?>



## PHP Array

- An array is a compound data type.
- It can store multiple value of same data type in single variable.

Ex.

```
<?PHP  
$cars = array("Volvo", "BMW", "Toyota")  
var_dump($cars);  
>
```

output:

```
array(3) 3  
  [0] =>  
    string(5) "Volvo"  
  [1] =>  
    string(3) "BMW"  
  [2] =>  
    string(6) "Toyota"  
)
```

## PHP Object

Object or instance of user-defined class that can store both value & functions.

Ex

```
<?PHP  
class Bike {  
    function model() {  
        $model_name = "Royal Enfield"  
        echo "Bike Model: " . $model_name;  
    }  
}  
$obj = new Bike();  
$obj->model();  
>
```

output Bike Model: "Royal Enfield"



## PHP RESOURCE

- Resource are not exact data type in PHP.
- Basically there are used to store some function call or reference to external PHP resource.

eg. A Database call

## PHP NULL

- PHP NULL is a special data type has only one value: NULL.
- There is no value.
- A variable data type NULL is variable that has no value assigned it.

Ex. < PHP

\$n1 = NULL;

echo " \$n1 is null "

??



Q-67 Describe the different type of built-in function of PHP.

### - PHP function

- PHP function is a piece of code that can be reused many times.
- it can take input as argument list and return value.
- There are thousands of built-in function in PHP.
- PHP can define condition, function, function within function & Recursive function as.

### • Create user define function

- We can declare our user-defined function easily. let see the syntax user define function

```
function functionname() {  
    code  
}
```

Ex.

~~PHP~~ <?PHP

```
function SayHello() {  
    echo "Hello PHP function";  
}  
SayHello(); // call
```

> ?>.



## • PHP function Argument

We can pass the information in PHP function through argument which separate by comma.

- PHP support call by value, call by reference, default argument value, variable length argument.

Ex

<? PHP

```
function SayHello ($Name) {
```

```
    echo "Hello $Name <br>";
```

```
}
```

```
SayHello ("Priyush");
```

```
SayHello ("Khobraya");
```

```
?>
```

Out ~~Hello~~ Hello Priyush

Hello Khobraya

## • PHP call by Reference

value passed to the function doesn't modify the actual value by default. But we can do so by passing value as Reference.

- To pass value as reference, you need to use ampersand (&) symbol before the argument name.



Ex

<?PHP

~~function adder(\$a, \$b)~~

<?PHP

function adder (&\$a, &\$str2)

{

\$str2 = "can By Reference";

\$str = 'Hello';

adder (&\$str);

echo \$str;

}

Output : Hello can By Reference

• PHP function Return value

<?PHP

function cube (\$n) {

return \$n \* \$n \* \$n;

}

echo "Cube of 3 is: " . cube(3);

}

Cube of 3 is: 27



20

Explain 4 PHP variable. Explain them with the help of Syntax.

### PHP Variable

In PHP variable is declared using a \$ sign followed by the variable name. Here some important points to know about variable.

- PHP is a loosely typed language, not required declare data type
- Assignment operator is (=) used to assign value to variable

Syntax = \$variablename = value ;

### Rule

- ① Variable must start with dollar \$ sign
- ② It can only alpha-numeric character and underscore
- ③ A variable name must start with letter (-) character
- ④ PHP cannot contain space

Ex

<?>

\$str = "Hello"

\$x = 200;

\$y = 24.6;

echo "string is: \$str" <br>

echo "string is: \$x" <br>

echo "string is: \$y" <br>

!>



### Q-3) Define the PHP Operators

PHP operator is symbol i.e. used to perform operation on operands. In simple words, operator is used to perform operation on variables or values.

#### ① Arithmetic Operator

| Operator | Name           | Ex.          |
|----------|----------------|--------------|
| +        | Addition       | $\$a + \$b$  |
| -        | Sub.           | $\$a - \$b$  |
| *        | Mul.           | $\$a * \$b$  |
| /        | Divi.          | $\$a / \$b$  |
| %        | Modul.         | $\$a \% \$b$ |
| **       | Exponentiation | $\$a ** \$b$ |

#### ② Assignment Operator

| Operator | Name   | Ex.            |
|----------|--|----------------|
| =        | Assign                                       | $\$a = \$b$    |
| +=       | Add then Assign                              | $\$a += \$b$   |
| -=       | Subtract then assign                         | $\$a -= \$b$   |
| *=       | Multiply then assign                         | $\$a *= \$b$   |
| /=       | <del>Divide then</del><br>Divide then Assign | $\$a /= \$b$   |
| %=       | Divide then Assign                           | $\$a \% = \$b$ |



## • Bitwise Operator

| Operator | Name       | Ex               |
|----------|------------|------------------|
| $\&$     | AND        | $\$a \& \$b$     |
| $ $      | OR         | $\$a   \$b$      |
| $\wedge$ | XOR        | $\$a \wedge \$b$ |
| $\sim$   | NOT        | $\sim \$a$       |
| $\ll$    | Left Shift | $\$a \ll 4$      |

## • Comparison Operator

| Operator | Name         | Ex           |
|----------|--------------|--------------|
| $=$      | Equal        | $\$a == \$b$ |
| $==$     | Identity     | $\$a == \$c$ |
| $!=$     | Not Identity | $\$a != \$c$ |
| $<$      | Less than    | $\$a < \$b$  |
| $>$      | Greater than | $\$a > \$b$  |



Q. 6) Explain the different built in web application using PHP (making form).

=> The PHP super global `$_GET` and `$_POST` are used to collect form data.

- GET :

- Information sent from a web with the GET method is visible to everyone.

- GET also has a limited amount of information to send.

• POST

- POST request is widely used to submit form that have large amount of data (such as file upload, image, video, long form, etc).

- The data passed through POST request is not visible on URL browser so it is secure.

GET

```
< form action="welcome.php" method="get" >  
  Name <input type="text" name="name">  
  " <input type="submit" value="Visit">  
</form>
```

< ?php >

```
$name = $_GET['name']
```

```
echo "welcome, $name"
```



POST

```
<form action="login.php" method="post">
```

```
<input type="text" name="name" value=""/>
```

```
<input type="text" name="password" value=""/>
```

```
<input type="submit" value="login" />
```

```
</form>
```

```
<?php
```

```
$name = $_POST["name"]
```

```
echo "welcome ! $name"
```

```
?>
```

20/10/2022  
23