

**Read this first:**

PHP has two distinguished features like case insensitive and loosely type language. Case insensitive means you can write code either in upper case or lower case it doesn't mean to it. And loosely type means variable will have data type according to its assigned value.

**Echo and Print**

Echo and print both uses for output the things. Both are not really functions so we can use without parentheses. But major difference between echo and print are as below.

Echo	Print
Has multiple argument	Has single argument
Never return a value	Always return 1.

Example of echo:

```
<html>
<body>

<?php
echo 'This ','is ','example ','of ', echo ',','with multiple parameters.';
?>

</body>
</html>
```

Output:

Example of print:

```
<html>
<body>

<?php
print "This is example of print.";
?>

</body>
</html>
```

Output:

## Variables

Variables in PHP are represented by a dollar sign followed by the name of the variable. The variable name is case-sensitive.

Rules for PHP variables:

- A variable starts with the \$ sign, followed by the name of the variable
- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and \_)
- Variable names are case-sensitive (\$name, \$NAME and \$Name are two different variables)

Example of Variable:

```
<?php
$name = "Mr. John";
echo "Our dean is " . $name . ".";
?>
```

Output:

*Important: No need to define data type with variable declaration so it is called Loosely Type language.*

## Scope of Variable

The scope of a variable is the part of the script where the variable can be referenced/used.

PHP has three different variable scopes:

- Local  
A variable declared within a function has a LOCAL SCOPE and can only be accessed within that function:
- global

A variable declared outside a function has a GLOBAL SCOPE and can only be accessed outside a function:

- static

Normally, when a function is completed/executed, all of its variables are deleted. However, sometimes we want a local variable NOT to be deleted. We need it for a further job. To do this, use the static keyword when we first declare the variable.

### Can we access the global variables inside the function (in local scope)?

Yes. We can access the global variables inside the function either with “**global**” keyword before variable or using array “\$GLOBALS[‘index’]”. (Here, index is name of variable without \$ sign.

```
<?php
$x = 5;
$y = 10;

function myTest() {
    global $y;
    $y = $GLOBALS['x'] + $y;
}

myTest();
echo $y; // outputs 15
?>
```

**Answer the followings:**

1. \_\_\_\_\_ always return a value (echo/print).
2. I can output one or more things.
3. In PHP we can use global variables inside the local scope. Answer and Justify.

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**Data Types**

PHP is loosely type scripting so there is no need to define data type when we declare variables. But it doesn't mean that PHP do not have data types. PHP does not require (or support) explicit type definition in variable declaration; a variable's type is determined by the context in which the variable is used. PHP has eight data types as below.

Data Type	Description	Example
String	A string is a sequence of characters. A string can be any text inside quotes.	"Hello world!".
Integer	An integer data type is a non-decimal number between -2,147,483,648 and 2,147,483,647. It can store positive or negative numbers. It can store: decimal (10-based), hexadecimal (16-based - prefixed with 0x) or octal (8-based - prefixed with 0)	123 -234 12354653
Float	A float (floating point number) is a number with a decimal point or a number in exponential form.	23.34 -98.23
Boolean	A Boolean represents two possible states: TRUE or FALSE.	TRUE FALSE
Array	An array stores multiple values in one single variable.	array(3) { [0]=> string(5) "Volvo" [1]=> string(3)

		"BMW" [2]=> string(6) "Toyota" }
Object	Object data type is used to store object. An object is a data type which stores data and information on how to process that data.	
NULL	Null is a special data type which can have only one value: NULL.	NULL
resource	The special resource type is not a primitive data type. It is the storing of a reference to functions and resources external to PHP. A common example of using the resource data type is a database call.	

**Very Useful:** As PHP do not need to define data type when we declare, PHP variable can store any type value anytime. For example; if we assign \$var a string value it takes string data type, later if we assign \$var an integer value it takes string data type. In spite of this feature is advantage some time we need to know what data types is assigned in to variable or need to know variable is assigned any value or not.

In such situation **var\_dump()** is very useful.

### Why PHP is called Loosely Type language?

### Lab Assignment

1. Write a PHP script that will demonstrate use of local, global and static keywords.
2. Write a PHP script that will illustrate PHP is loosely type language.