

What is PHP ?

- PHP is an acronym for "PHP: Hypertext Preprocessor"
- PHP is a widely-used, open source scripting language
- PHP scripts are executed on the server
- PHP is free to download and use

What is PHP file ?

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

❖ Create first php file

- We can create a php file by giving .php extension to it.
- we have to run php file from server. We can not run php file like any other file like html or JavaScript.
- To start php file we have to first write `<?php ?>`
- In between these tags we can write our php code.
- Example :

```
<?php  
    echo "Hello World!";  
?>
```

❖ phpinfo ()

- The `phpinfo()` function can be used to output a large amount of information about your PHP installation.
- It can also be used to identify installation and configuration problems.
- To know all the details about our php installation we have to run this function in our php program
- Example :

```
<?php
    phpinfo( );
?>
```

- When we run our program it will display all the details about our php installation.

❖ php.ini file

- Sometimes you need to change the behavior of PHP at runtime, then this configuration file is to use.
- Each time PHP is initialized, the php.ini file is read by the system.
- All the settings related to register global variables, upload maximum size, display log errors, resource limits, the maximum time to execute a PHP script and others are written in a file as a set of directives which helps in declaring changes.
- Generally we can find this file in C:/xampp/php/php.ini
- We can also get its path by running phpinfo() function.
- There are lot's of keys in this file which are case-sensitive , lines starting with ; are ignored and the Boolean values are represented with 0/1 , true/false , yes/no , on/off

❖ Echo & print

- echo and print both are used to output the data on the screen
- we can use both echo & print with or without parenthesis
- it's just simply display the output on the screen.

- Example :

```
<?php
    echo "Hello world!";
```

```
print "<b> Hello world! </b>";

$a = 40;

$b = 5;

echo "$a + $b";

?>
```

- This way we can use both print and echo to output the data on the screen.

❖ Output html using echo & print

- As we know that we can output data using echo and print.
- We can also output the html using these two.
- Simply we have to write html into " " or ' ' inverted commas as per our requirement.
- Example :

```
<?php

echo "<strong> hey, what are you doing ? </strong>";

print "<input type='text' value='hello'>";

?>
```

❖ Embedding php inside html

- As we can write html inside php as the same way we can write php inside html also.
- Whenever we have to write php we have to write it in <?php ?>
- Example :

```
<html>

<body>
```

```
<input type="text" value="<?php echo 'hello' ?> required">
</body>
</html>
```

- This way we can write php in html anywhere

❖ Comments

- Comments are the part which is not rendered in php
- It means that whatever we write in comments , it will not have any kind of effect in output
- Generally the comments are written down for the information.
- We can write comments for our information. For example if we write some code then we can provide information and what it will do all these things in comments.
- There are mainly two types of comments. One is single line comments and another one is multi line comments.
- Example :

```
<?php
    /*
        Date: 22nd January , 2021
        Author : rohit lalwani
    */
    $name = "rohit";
    echo "$name"; // the next line will print the name
?>
```

❖ Error reporting

- Error reporting is a part of php.ini file. As we know that all the configurations are there in php.ini file.

- Error reporting is kind of setting we can say. We can decide that if there is a problem in our program then we have to display the error or not ?
- If we set error reporting is true then it will display us the errors and if we want then we can set it to false also.
- We can do it by two ways. First we can go to php.ini file and the second is to use the functions `error_reporting()` and `ini_set()`.
- There are so many values we can set into `error_reporting` as per our requirements.
- If we just want to display warnings then we can do that , if we want to display errors and warnings both then we can set that likewise.
- Example :

```
<?php
    error_reporting(1); //first way
    Ini_set('error_reporting' , 'E_ALL'); //second way
?>
```

❖ Variables

- We can create variables in php so easily. We don't have any kind of requirement to clarify the datatype.
- We just have to use \$ sign and then variable name
- Variable name can start with alphabets and underscore
- Variable name can only contain alpha-numeric characters and underscore.

- Example :

```
<?php
    $name = "Rohit Sharma";
```

```
$number = 45;

echo "the name is : " . $name . " and his jersey number is : "
. " $number;

?>
```

❖ Concatenation

- Concatenation operator is used to concat the variables and strings.
- If we want to print the output of variable with the string then we need to concat them.
- Example :

```
<?php

$name = "Rohit Lalwani";

echo "my name is : " . $name;

?>
```

❖ If else statement

- If else statement is used to take decisions.
- It will perform if block if the conditions is true and else block if the condition is false.
- We can simply use if statement alone also. In that case it will only execute the block of code if the condition is true otherwise nothing will be executed.

- Example :

```
<?php

$number1 = 45000;
```

```
$number2 = 50000;

If(number1 > number2) {
    echo "number 1 is bigger than number 2";
}

else {
    echo "number 1 is smaller than number 2";
}

?>
```

❖ If else if else

- For example if we have to check more than two conditions at that time we can use if else if else statement
- We can have as many else if block as we want
- Example :

```
<?php

$number = 5;

If($number > 0) {
    echo "number is positive";
}

else if ($number < 0){
    echo "number is negative";
}

else {
    echo "number is zero";
}

?>
```

❖ Assignment operators

- We can use assignment operators to assign the values to the variables.
- Here is the list of assignment operators : = , += , -= , *= , /= , % =
- These all operators are called assignment operators.
- Example :

```
<?php
    $number = 45;
    echo $number += 5 ; // add 5 in number
    echo $number -= 5; // subtract 5 from number
?>
```

❖ Comparison operators

- Comparison operators are used to compare to values.
- Here is the list of comparison operators : == , === , != , <> , !== , > , < , >= , <= , <= > .
- == is equal operator. It will return true if both values will be same. It will not check the datatype.
- === is identical operator. It will return true if both values will be same as well as both datatypes will also be same.
- Example :

```
<?php
    $x = 100;
    $y = 154;
    echo $x == $y; // will return false or 0.
?>
```

❖ Logical operators

- Logical operators are used to combine conditional statements
- Here is the list of logical operators : and , or , xor , && , || , !

- Example :

```
<php
    $number1 = 150;
    $number2 = 50;
    If($number1 == 150 && $number2 == 50) {
        echo "Hello wprld!";
    } // will print hello because both the conditions are true
?>
```

❖ While loop & do while loop

- While and do while both are looping structures.
- While loop is entry control loop and do while is exit control loop.
- Both will iterate till the given condition becomes false.
- Example :

```
<?php
    $number = 5;
    // while loop
    While ($number > 0) {
        echo $number;
        $number--;
    }
```

```
//do while loop
do {
    echo $number;
```

```
$number--;  
} while ($number > 0);  
?>
```

❖ For loop

- For loop is also used to loop or iterate until the condition becomes false.
- It has three elements : one is init counter , second is test counter and third is increment counter.
- Example :

```
<?php  
$number = 5;  
for($i = 5 ; $i > 0 ; $i-- ) {  
    echo $number;  
}  
?>
```

❖ Switch statement

- The switch statement is used to perform different actions based on different conditions.

- Example :

```
<?php  
$favcricketer = "Rohit Sharma";
```

```
switch($favcricketer) {  
    case "Virat Kohli":  
        echo "Your favorite cricketer is virat kohli";  
        break;  
    case "Rohit Sharma":  
        echo "Your favorite cricketer is rohit sharma";  
        break;  
    case "M.S.Dhoni":  
        echo "Your favorite cricketer is m.s.dhoni";  
        break;  
    default:  
        echo "Your favorite cricketer is sachine";  
}  
?>
```

❖ die() & exit()

- die() and exit() both are used to stop the execution of php code.
- When we have to stop the execution of program at that time we have to use die() and exit().
- It will stop the program's execution

- Example :

```
<?php  
    echo "Hello ";
```

```
die();  
echo "World";
```

```
?>
```

