



Bharathidasan University

Centre for Differently Abled Persons

Tiruchirappalli - 620024.

- Programme Name: Bachelor of Computer Applications
- Course Code : 20UCA6CC9
- Course Title : PHP
- Unit : Unit I
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PHP

UNIT-1

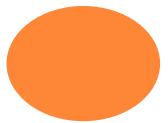
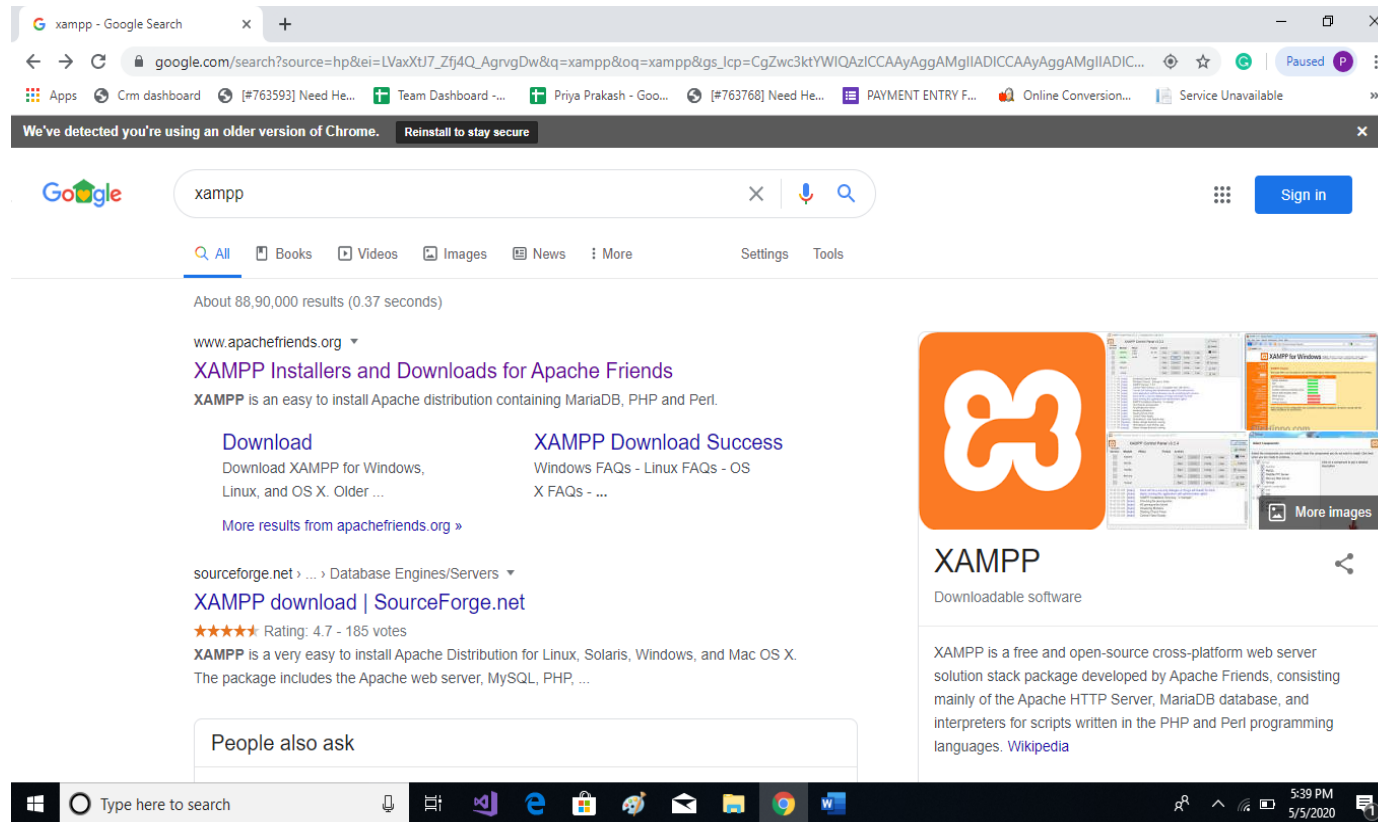
PHP

- ❖ PHP is Hypertext Preprocessor (or) Personal Home Page
- ❖ It is used for creating dynamic web pages.
- ❖ PHP is widely-used open source scripting language.
- ❖ It run on most operating system and with most web server.

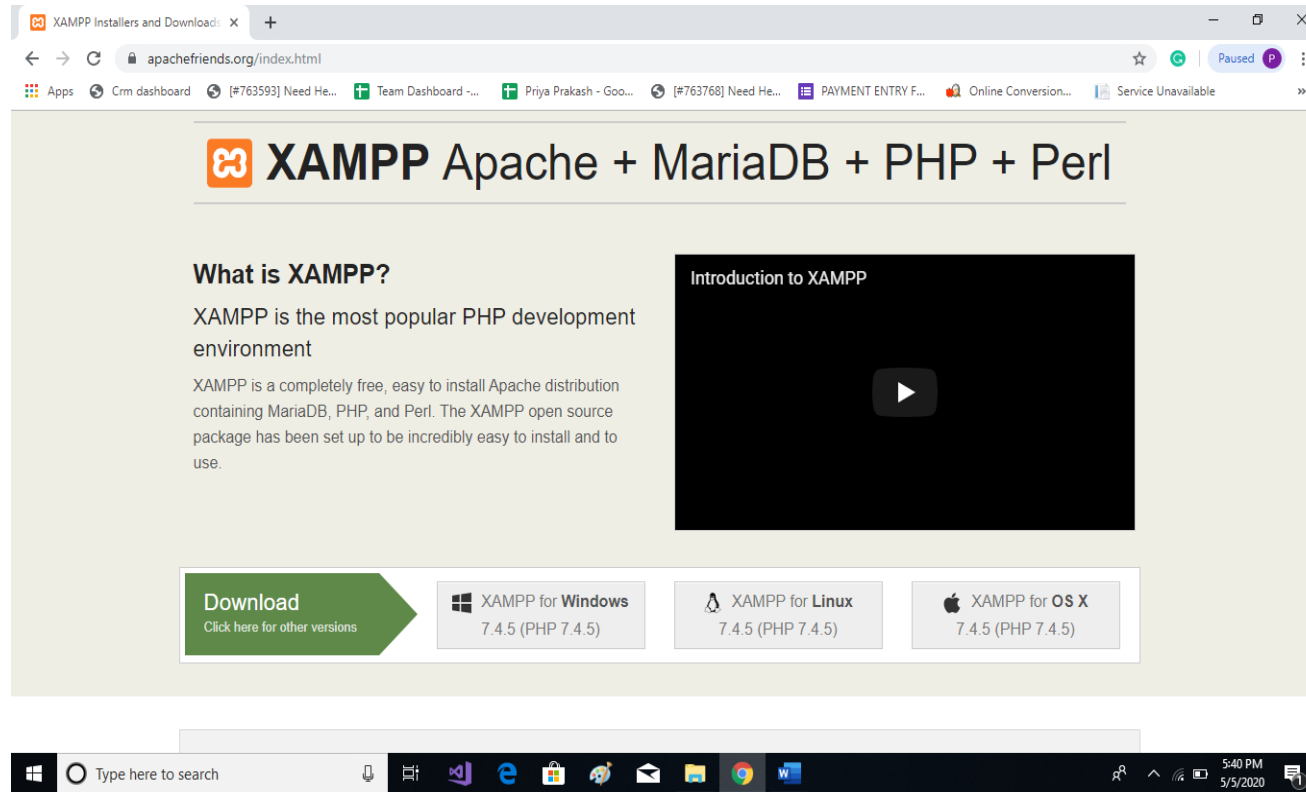


How to Download and Install?????

1. Go to browser , type XAMPP and click first link



2. Download the XAMPP that support Windows



The screenshot shows a web browser window displaying the XAMPP website. The browser's address bar shows the URL `apachefriends.org/index.html`. The page title is "XAMPP Installers and Download". The main heading is "XAMPP Apache + MariaDB + PHP + Perl". Below the heading, there is a section titled "What is XAMPP?" with a sub-heading "Introduction to XAMPP" and a video player. The text describes XAMPP as a popular PHP development environment. At the bottom, there are three download buttons: "Download" (with a link to other versions), "XAMPP for Windows 7.4.5 (PHP 7.4.5)", "XAMPP for Linux 7.4.5 (PHP 7.4.5)", and "XAMPP for OS X 7.4.5 (PHP 7.4.5)". The Windows taskbar is visible at the bottom, showing the search bar and various application icons. The system tray shows the time as 5:40 PM on 5/5/2020.

XAMPP Apache + MariaDB + PHP + Perl

What is XAMPP?

Introduction to XAMPP

XAMPP is the most popular PHP development environment

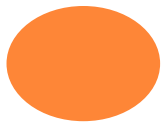
XAMPP is a completely free, easy to install Apache distribution containing MariaDB, PHP, and Perl. The XAMPP open source package has been set up to be incredibly easy to install and to use.

Download
Click here for other versions

XAMPP for Windows
7.4.5 (PHP 7.4.5)

XAMPP for Linux
7.4.5 (PHP 7.4.5)

XAMPP for OS X
7.4.5 (PHP 7.4.5)



downloadsapachefriends.global.s x Download XAMPP from SourceFo x +

sourceforge.net/projects/xampp/files/latest/download

Apps Crm dashboard [#763593] Need He... Team Dashboard -... Priya Prakash - Goo... [#763768] Need He... PAYMENT ENTRY F... Online Conversion... Service Unavailable


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 **XAMPP**
An easy to install Apache distribution containing MySQL, PHP, and Perl
Brought to you by: [bitnami](#), [koswalds](#), [kvoegelgesang](#)

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xampp-windows-x64-7.4.5-0-VC15-installer.exe | Scanned by: **Bitdefender**

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Other Useful Business Software

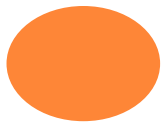
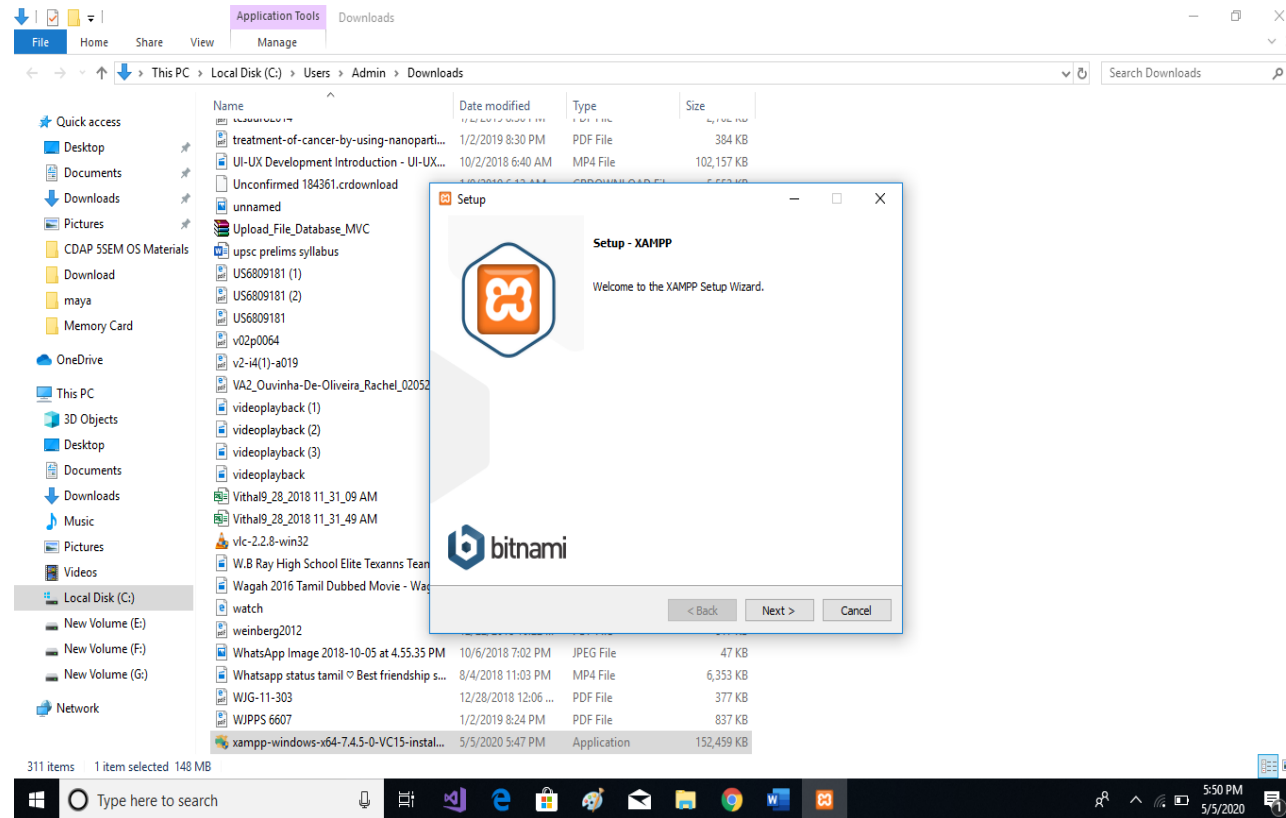
xampp-windows-x...exe 0.4/149 MB, 26 mins left Show all

Type here to search

5:41 PM 5/5/2020

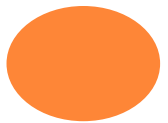


3. Set the file into C drive and start the installation

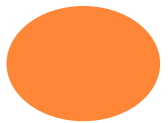
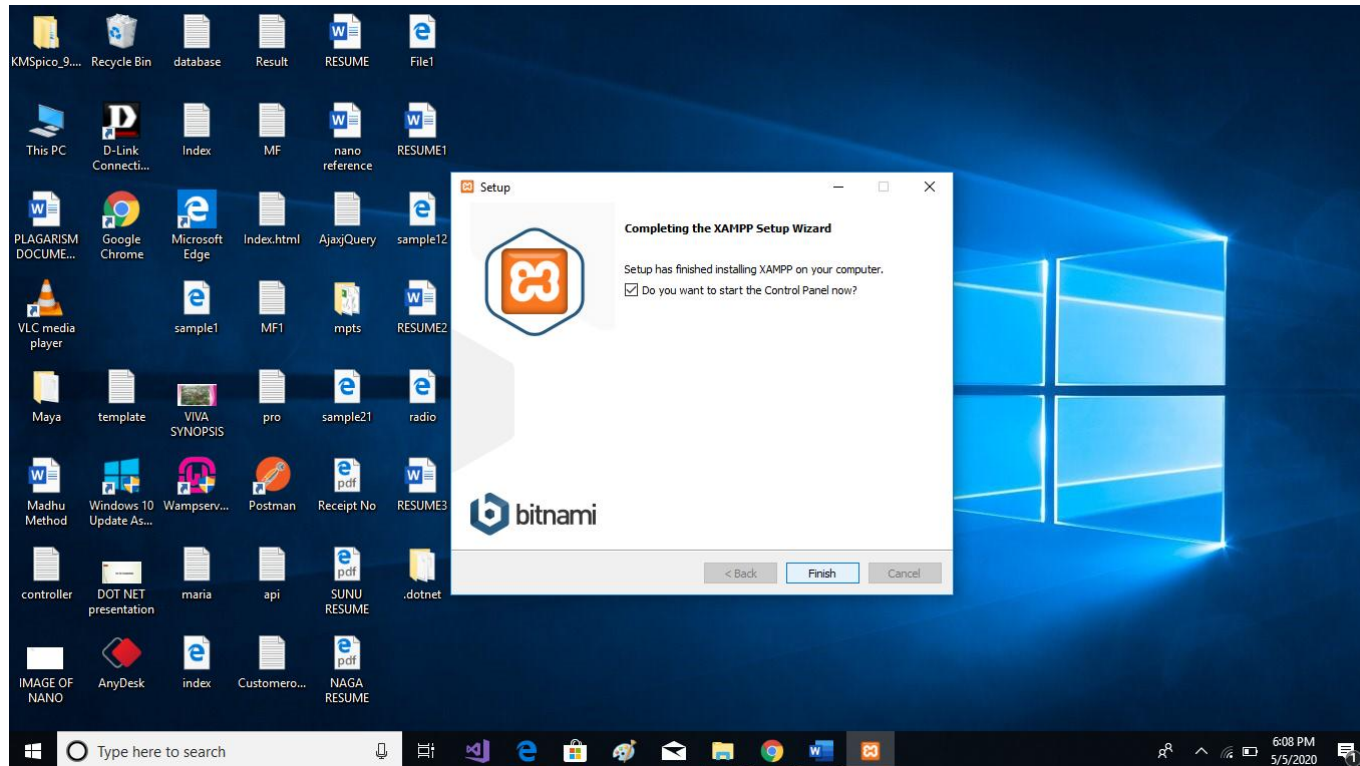


The image shows a Microsoft Word document titled "PHP - Word" with the ribbon set to "Home". The ribbon includes options for File, Home, Insert, Design, Layout, References, Mailings, Review, View, and Help. The Font section shows "Times New Roman" in size 12. The Paragraph section shows various alignment and bullet point options. The Styles section shows "Normal" selected. The Editing section shows "Find", "Replace", and "Select" options. A "Setup" dialog box for XAMPP is open in the center, titled "Setup" with the XAMPP logo. It asks to choose an installation folder, with "C:\xampp" entered in the text box. The dialog has "< Back", "Next >", and "Cancel" buttons. The background shows a Windows 10 desktop with a taskbar containing icons for Edge, File Explorer, Chrome, Word, and XAMPP. The system tray shows the time as 5:50 PM on 5/5/2020. At the bottom of the Word window, it says "Page 4 of 5" and "235 words".

2. Scroll down and click DOWNLOAD



4. Once the installation is completed, Click FINISH



5. START the apache server to run the php page

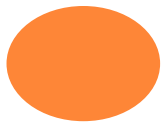


The screenshot shows the XAMPP Control Panel v3.2.4 interface. The top section displays a table of modules with their respective services, ports, and actions. Below this is a log window showing the system's output during the initialization process.

Service	Module	PID(s)	Port(s)	Actions
<input type="checkbox"/>	Apache			Start Admin Config Logs
<input type="checkbox"/>	MySQL			Start Admin Config Logs
<input type="checkbox"/>	FileZilla			Start Admin Config Logs
<input type="checkbox"/>	Mercury			Start Admin Config Logs
<input type="checkbox"/>	Tomcat			Start Admin Config Logs

Log output:

```
6:08:30 PM [main] Initializing Control Panel
6:08:30 PM [main] Windows Version: Enterprise 64-bit
6:08:30 PM [main] XAMPP Version: 7.4.5
6:08:30 PM [main] Control Panel Version: 3.2.4 [ Compiled: Jun 5th 2019 ]
6:08:30 PM [main] You are not running with administrator rights! This will work for
6:08:30 PM [main] most application stuff but whenever you do something with services
6:08:30 PM [main] there will be a security dialogue or things will break! So think
6:08:30 PM [main] about running this application with administrator rights!
6:08:30 PM [main] XAMPP Installation Directory: "c:\xampp\"
6:08:30 PM [main] Checking for prerequisites
6:08:41 PM [main] All prerequisites found
6:08:41 PM [main] Initializing Modules
6:08:41 PM [Apache] Problem detected!
6:08:41 PM [Apache] Port 80 in use by "Unable to open process" with PID 4!
6:08:41 PM [Apache] Apache WILL NOT start without the configured ports free!
6:08:41 PM [Apache] You need to uninstall/disable/reconfigure the blocking application
6:08:41 PM [Apache] or reconfigure Apache and the Control Panel to listen on a different port
6:08:41 PM [main] Starting Check-Timer
6:08:41 PM [main] Control Panel Ready
```



LANGUAGES BASICS

- ❖ PHP runs on different operating systems (LINUX, UNIX, Windows)
- ❖ PHP is compactible with all web servers
- ❖ PHP is run using XAMPP Package
- ❖ XAMPP is a open source cross platform web server solution stack package.
- ❖ It contains Apache HTTP server, database, PHP and PERL programing language
- ❖ It is dynamic web page that is content of pages every time when user use the we sites



- PHP runs on different operating systems (LINUX, UNIX, Windows)

Lexical Structure of PHP

The lexical structure of php is

```
<?php  
    // Statement  
?>
```



➤ **SEMICOLON**

- Every php statement terminates or ends with a semicolon (;)

➤ **WHITESPACE**

- `\n` → new line
- `\t` → Tab
- `\\` → Backspace

➤ **COMMENTS**

- Comments are used to understand the code
- `#` → single line comment
- `/*` `*/` → multiline comment



DATA TYPES

Data types - Addressing variable

1. INTERGER

Integer are whole number

They can be positive or negative

Eg: 60.

`$value = 10;`

`$total =200;`



2. FLOATING POINT NUMBER

Floating number are decimal number

Eg: 3.14

\$dec = 3.14;

\$num = 2.2288;

3. BOOLEAN

Have only two possible value

TRUE or FALSE



4. STRING

Strings are sequence of character

There is no limit to the length of the string

The word“ECHO” is used to print the statement

```
<?php
```

```
echo "Have a Great Day”
```

```
?
```

OUTPUT:

Have a Great Day

5. ARRAY

Array are special type variables that hold multiple values

Eg: Colors or Days of the week



6. OBJECTS

- ❖ They are complex type
- ❖ They hold multiple value
- ❖ They have their own method

7. NULL

Special type that has only one value → NULL

Eg:

```
$my_var = NULL;
```



VARIABLES

- Variables is a symbol or name that stand for a value
- Variable points to memory location of value stored
- A variable is named or declared using the \$ character.
- The variable is a mixture of alphabets and numbers.

Eg:

```
<?php  
$Myclass = 'BCA';  
?>
```

➤ PHP is a case-sensitive



ASSIGNING THE NUMBER TO THE VARIABLES

To assign value to the variable

Eg:

```
$rollno = 1:
```

```
$age = 23;
```

JOINING STRINGS

Strings can be concatenated using (.) dot character



Example:

```
<?php
```

```
$name1= 'Abdul';
```

```
$name2= 'Kalam';
```

```
echo $name1 . $name2;
```

or

```
echo $name1. ' '. $name2;
```

Output

First Echo Statement → Abdulkalam

Second Echo statement → Abdul Kalam.



FLOW CONTROL STATEMENT



FLOW CONTROL

- Control statement is flow of execution of set of statement repeated until given condition is met.

1. IF STATEMENT

If statement is used to check if an expression is true

Syntax

```
if(condition)  
    Statement
```



Example:

```
<?php
$num = 10;
if($num > 0)
    echo "\ $num is positive number \n" ;
?>
```

Output:

10 is positive number



2. IF ELSE STATEMENT

- If Else statement is used to check the condition.
- If condition is true, statement 1 will be executed or statement 2 will be executed.

Syntax

```
if(condition)
    Statement 1
else
    Statement 2
```



Example

```
<?php
    $sex="Female"
    if($sex == "male")
    {
        echo " It is a boy\n";
    }
    else { echo " It is a girl\n";
}
?>
```

Output:

It is a girl



3. ELSE-IF LADDER

In Else-if statement, a single IF condition has multiple ELSEIF statement.

Syntax

```
if(condition)
{ Statement1; }
elseif(condition)
{ Statement2; }
Else
{ Statement3;
}
```



Example:

```
<?php
$average = 88;
if($average > 90)
{
    echo "\ Outstanding \n" ;
}
elseif($average > 70)
{
    echo "\ First Class \n" ;
}
```



```
elseif($average > 40)
{
    echo "\ second Class \n" ;
}
else
{
    echo "\ Fail \n" ;
}
?>
```

Output

First Class



4. SWITCH STATEMENT

Switch statement is used to select one statement from block of many statement based on condition

Syntax

```
Switch(condition)
{
    Case label1:
        Statment1; Break;
    Case label2:
        Statement 2; Break;
    Default:
        Statement 4; Break;
}
```



Example

```
<?php
$country= 'ind';
Switch($country)
    Case 'us' :
        echo "\ America \n" ;
        break;
    Case 'pak' :
        echo "\ Pakistan \n" ;
        break;
```



Case 'ind':

```
echo "\ India \n" ;  
break;
```

default:

```
echo "Null\n"  
break;
```

?>

Output:

India



5. WHILE LOOP

While loop allows code to execute repeatedly based on a given condition

Syntax

```
While(condition)  
    Statement 1;
```

Example:

```
<?php  
  
    $i=0;  
    while($i<3) {  
        echo" Have a great day";  
        $i++;    ?>
```



Output:

Have a great day

Have a great day

Have a great day



6. DOWHILE LOOP

DoWhile loop allows code to execute repeatedly based on a given condition

The loop run at least once even though condition is false

Syntax

```
Do  
{  
    Statement;  
} while(condition)
```



Example

```
<?php
    $i=0;
    Do{
        echo" Have a great day";
        $i++;
    }while($i=3)
?>
```

Output:

Have a great day

Have a great day

Have a great day



7. FOR LOOP

The For loop is used to execute a flow of code based on a condition.

Syntax

```
For(Initialization ;condition; incrementation)
{
    Statement1;
}
```

Initialization → setting an initial value

Condition → set a condition to run the loop

Incrementation → increment to next loop



Example:

```
<?php
    For($i=0;$i<=3;$i++)
    {
Echo "The number is : $i \n";
    }
?>
```

Output:

```
The number is 0
The number is 1
The number is 2
The number is 3
```



8. FOREACH LOOP

foreach loop works only on arrays

Syntax

```
Foreach($array as $value)
{ Statement; }
```

Example:

```
<?php
$color=array("red", "green", "blue" , "yellow");
Foreach($color as $value)
{
    Echo "$value <br>";
} ?>
```



Output:

red

green

blue

yellow



9. BREAK STATEMENT

Break statement is used to terminate the loop

Example:

```
<?php
for($i=0;$i<=5;$++)
{
    if($i==2)
    {
        Break;
    }
    echo $i;
```




```
echo "<br />";  
}  
Echo "End of For Loop";  
?>
```

Output:

0

1

End of For Loop



10. CONTINUE STATEMENT

Continue statement is used to skip a part of the loop and continue with next iteration of the loop

Example:

```
<?php
for($i=0;$i<=5;$i++)
{
    if($i==2)
    {
        continue;
    }
    echo $i;
```



```
echo "<br />";  
}  
Echo "End of For Loop";  
?>
```

Output:

0

1

3

4

5

End of For Loop





OPERATORS AND EXPRESSION

Expression

- Expression is combination of values, variables, operator and function that result in value
- Expression is anything that has a value
- $\$a + \$b = 10$
- $\$a, \$b \rightarrow$ operand
- $+, = \rightarrow$ operators
- $10 \rightarrow$ Value



For Example:

```
<?php
```

```
    $a= 10;  
    $b= 20;  
    $c= $a + $b;  
    echo $c;
```

```
?>
```

Output:

C= 30.



Operator

Operator are used to perform operation on variables and values

Variable used for expression is operand

$$\$a + \$b = 12$$

Where,

$\$a , \$b \rightarrow$ operand

$+ , = \rightarrow$ operator



1. Arithmetic Operators

Arithmetic operators are used with numeric values to perform common

mathematical operation like addition, subtraction etc.

Operator	Description	Example
+ → Addition	Add two operands	$\$a + \b
- → Subtraction	Subtract two operand	$\$a - \b
* → Multiplication	Multiply two operand	$\$a * \b
/ → Division	Divide two operand	$\$a / \b
% → Modulus	Remainder after division	$\$a \% \b
** → Exponentiation	Raise to the power of 1 st operand	$\$a ** \b



2.Comparison Operator

Comparison operator is used to compare the values

Operator	Description	Example
<code>==</code> → Equal	Check if the values are equal	<code>\$a == \$b</code>
<code>!=</code> → Not Equal	Check if the values are not equal	<code>\$a != \$b</code>
<code>></code> → Greater than	Check if the left operand greater than right operand	<code>\$a > \$b</code>
<code><</code> → Less than	Check if the left operand less than right operand	<code>\$a < \$b</code>
<code>>=</code> → Greater than or equal	Check if the left operand greater than or equal to right operand	<code>\$a >= \$b</code>
<code><=</code> → Less than or equal to	Check if the left operand less than or equal to right operand	<code>\$a <= \$b</code>



3. Assignment Operator

'=' is a simple assignment operator

Used to assign values to the variable

Operator	Description	Example
=	Assign value from right to left operand	$\$a = \$b + \$c$
+=	Add right operand to left operand and assign result to left operand	$\$c += \a is equal to ($\$c = \$c + \$a$)
-=	Subtract right operand to left operand and assign result to left operand	$\$c -= \a is equal to ($\$c = \$c - \$a$)
*=	Multiply right operand to left operand and assign result to left operand	$\$c *= \a is equal to ($\$c = \$c * \$a$)
/=	Divide right operand to left operand and assign result to left operand	$\$c /= \a is equal to ($\$c = \$c / \$a$)
%=	Modulus using two operands and assign the result to left operand	$\$c \% = \a is equal to ($\$c = \$c \% \$a$)



4. Logical Operator

It is used to combine conditional statement.

Operator	Description	Example
And → Logical AND	If both operands are true then condition become true	\$a and \$b
Or → Logical Or	If any of the two operand is non zero then condition is true	\$a or \$b
&& → Logical AND	If both the two operand is non zero, condition is true	\$a && \$b
→ Logical Or	If any of the two operand is non zero, condition is true	\$a \$b
! → Logical NOT	Reverse the condition. If a condition is true then result is false	! \$a



5. Increment and decrement Operator

This operator is used to increase or decrease a variable's value

Operator	Description	Example
++	Pre-Increment	Increment a value by one and return the value
	Post-Increment	Return the value then increment by one
--	Pre-decrement	Decrement a value by one and return the value
	Post-decrement	Return the value then decrement by one



6. Conditional Operator

Conditional operator are used to set a value depending on condition.

Operator	Description	Example
?:	Condition expression	If(\$a > \$b) \$a: \$b



Precedence of Operator

Operator precedence is grouping of expressions

Certain operator have higher precedence than others

For example:

$$X = 7 + 3 * 2$$

In this expression, * has higher precedence than +

So,

$$1 \rightarrow 3 * 2 = 6$$

Then add the following

$$2 \rightarrow 7 + 6 = 13$$

$$X = 7 + 6$$

$$X = 13.$$



THANK YOU

