Module1:(Program- 1)InstallationofXAMPP/WAMP. Accessatestpage using adevice (Laptop/Desktop/Mobile) within LAN or hotspot using its private IP address.

InstallingXAMPP

Our XAMPP tutorial will take you through the installation process for the software package on Windows. If you're using Linux or Mac OS X, then the steps listed below for the installation process may differ.

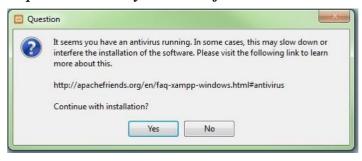
Step1:Download

XAMPP is a release made available by the non-profit project Apache Friends. Versions with PHP 5.5, 5.6, or 7 are available for download on the Apache Friendswebsite.

Step2:Run.exe file

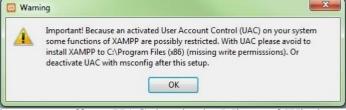
Oncethesoftwarebundlehasbeendownloaded, you can start the installation by double clicking on the file with the ending .exe.

Step3:Deactivateanyantivirussoftware



Since anactive antivirus programcan affect the installation negatively process, recommended it's temporarily pause antivirus any software until XAMPP all components have successfully been installed. Before installing XAMPP, it isadvisabletodisabletheanti-virus program temporarily

Step4:Deactivate UAC



User Account Control (UAC) can interferewiththeXAMPP installation because it limits writing access to the C: drive, so we recommend you deactivate this too for the duration of theinstallationprocess. To find out

howtoturnoffyourUAC, headtothe MicrosoftWindowssupport pages. User account control can affect the installation of XAMPP

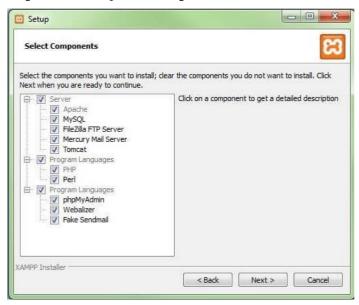
Step 5:Startthesetupwizard



After you've opened the .exe file (after deactivating your antivirus program(s) and taken note of the User Account Control, the start screen of the XAMPP setup wizard should appear automatically. Click on 'Next' to configure the installation settings.

Youcanstartthesetuponthestartupscreen

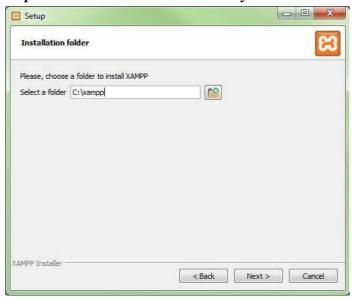
Step6: Chooses of tware components



Under 'Select Components', you have the option to exclude individual components of the XAMPP software bundle from the installation. But for a full local test server, we recommend you install using the standard setup and all available components. After making your choice, click 'Next'.

In the dialog window entitled 'select components', you can choose the software components before installation

Step7:Choosetheinstallationdirectory



In this next step, you have the chance to choose where you'd like the XAMPP software packet to be installed. If you opt for the standard setup, then a folder with the name XAMPP will be created under C:\ for you. After you've chosen a location, click 'Next'.

For the next step, you need to select the directory where XAMPP shouldbe installed

Step8:Starttheinstallationprocess



Once all the aforementioned preferences have been decided, click to start the installation. The setup wizard will unpack and install the selected components and save them to the designated directory. This process can take several minutes in total. You can follow the progress of this installation by keeping an eye on thegreen loading bar in the middle of the screen.

According to the default settings, the selected software components are unpacked and installed in the target folder

Step9: Windows Firewall blocking

Your Firewall may interrupt the installation process to block the some components of the XAMPP. Use the corresponding check box to enable communication between the Apache server and your private network or work network. Remember that making your XAMPP server available for public networks isn't recommended.

Step 10:Completeinstallation



Once all the components areunpacked and installed, you can close the setup wizard by clicking on 'Finish'. Click to tick the corresponding check box and openthe XAMPP Control Panel once the installation process is finished.

By clicking on 'finish', the XAMPP Setup Wizard is completed TheXAMPP ControlPanel

Controls for the individual components of your test server can be reached through the XAMPP Control Panel. **The clear user interface** logs allactions and allows you to startor

ontrol Panel also offers you various other

buttons, including:

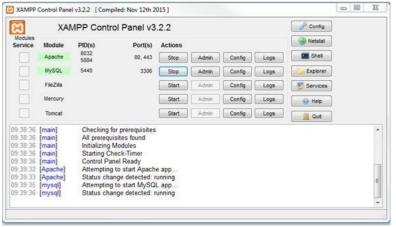
- **Config:**allowsyoutoconfiguretheXAMPPaswellastheindividualcomponents
- <u>Netstat</u>:showsallrunningprocessesonthelocalcomputer
- **Shell:** opensaUNIX shell
- Explorer: openstheXAMPPfolderinWindowsExplorer
- **Services:** showsallservicescurrentlyrunninginthebackground
- **Help:** offerslinkstouser forums
- Ouit:closestheXAMPP ControlPanel



IntheControlPanel,youcanstartandstopindividualmodules

Startingmodules

Individual modules can be started or stopped on the XAMPP Control Panel through the corresponding buttons under 'Actions'. You can see which modules have been started because their names are highlighted green under the 'Module' title.



Anactive module is marked in green in the Control Panel

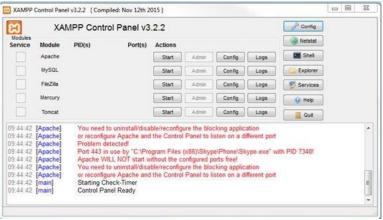
If a module can't be started as a result of an error, you'll be informed of this straight away in red font. A **detailed error report** can help you identify the cause of the issue.

SettingupXAMPP

A common source of error connected with Apache is **blocked ports**. If you're using the standardsetup,thenXAMPPwillassignthewebservertomainport80andtheSSLport

443. The latter of these particularly is often blocked by other programs. In the exampleabove, it's likely that the Tomcat port is being blocked, meaning the web server can't be started. There are three ways to solve this issue:

- Change the conflicting port: Let's assume for the sake of example that the instant messenger programSkype is blocking SSL port 443 (this is a commonproblem). One way to deal with this issue is to change Skype's port settings. To do this, open the program and navigate via 'Actions', 'Options', and 'Advanced', until you reach the 'Connections' menu. You should find a box checked to allow Skype access to ports80 and 443. Deselect this checkbox now.
- Change the XAMPP module port settings: Click the Config button for the module in question andopen thefiles httpd.conf and and and and port number 443 inhttpd-ssl.conf. Replaceportnumber 80 inhttpd-ssl.conf with any free ports, before saving the file data. Nowclick onthe generalConfig button on the right-hand side and select 'Services and Ports Settings'. Customize the ports for the module server to reflect the changes in the conf files.
- End the conflicting program: The simplest way to avoid port conflicts in the short term is to end the conflicting program (Skype in this case). If you restart Skype after your XAMPP module servers are already running, it will select a different port and your issue will be resolved.



Modules that can't be started will be shown in red. The user will also receive an error report to help solve the problem.

Accessatest pageusingadevice(Laptop/Desktop/Mobile) withinLANorhotspot using its private IP address.

How to run PHP programs in XAMPP PHP is a popular backend programming language. PHP programs can be written on any editor, such as - Notepad, Notepad++, Dreamweaver, etc. These programs save with .php extension, i.e., filename.php inside the htdocs folder.

Forexample-p1.php.

As I'm using window, and my XAMPP server is installed in D drive. So, the path for the htdocs directory will be "D:\xampp\htdocs".

PHPprogramrunsonawebbrowsersuchas - Chrome, Internet Explorer, Firefox, etc. Below some steps are given to run the PHP programs.

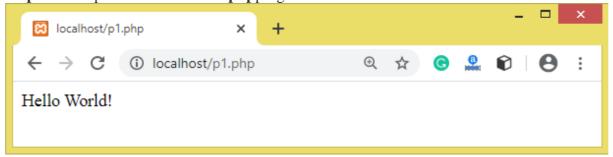
Step1:CreateasimplePHPprogramlikehelloworld.

- 1. <?php
- 2. echo"HelloWorld!";
- 3.?>

Step2: Savethefilewith**hello.php** nameinthehtdocsfolder,whichresidesinsidethe xampp folder. **Step3:**RuntheXAMPPserver and starttheApacheand MySQL.

Step4: Now,openthewebbrowserandtypelocalhost *http://localhost/hello.php*onyour browser window.

Step5:Theoutputfortheabovehello.phpprogramwill beshownasthescreenshotbelow:



Most of the time, PHP programs run as a web server module. However, PHP can also be run on CLI (Command Line Interface).

Task2: Design a Student Profile Data Management System for a college. Create a Database and its associated tables.

PHP MySQLCreateTable

Adatabasetable has itsownunique nameandconsistsofcolumnsandrows.

Create a MySQL Table Using MySQLi and PDO

The CREATETABLE statement is used to create at able in MySQL.

Wewillcreateatablenamed"MyGuests",withfivecolumns:"id","firstname","lastname", "email" and "reg_date":

```
CREATETABLEMyGuests(
```

idINT(6)UNSIGNEDAUTO_INCREMENTPRIMARYKEY,

firstnameVARCHAR(30)NOTNULL,

lastname VARCHAR(30) NOT NULL,

email VARCHAR(50),

 $reg_dateTIMESTAMPDEFAULTCURRENT_TIMESTAMPONUPDATE$

CURRENT_TIMESTAMP

Notes on the table above: The data type specifies what type of data the column can hold. For acompletereferenceofalltheavailabledatatypes, gotoour <u>DataTypesreference</u>. After the data type, you can specify other optional attributes for each column:

- NOTNULL-Eachrowmust containavalue forthat column, nullvaluesarenot allowed
- DEFAULTvalue-Setadefaultvaluethatisaddedwhennoothervalueispassed
- UNSIGNED-Usedfornumbertypes, limitsthestoreddatatopositivenumbersand zero
- AUTOINCREMENT-MySQLautomaticallyincreasesthe valueofthe fieldby1 each time a new record is added
- PRIMARYKEY- Usedtouniquelyidentifytherows inatable. The column with PRIMARY KEY setting is often an ID number, and is often used with AUTO INCREMENT

Eachtableshould haveaprimarykeycolumn(inthiscase:the"id"column). Itsvalue must be unique for each record in the table.

The following examples shows how to create the table in PHP:

```
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDB";

//Createconnection
$conn=newmysqli($servername,$username,$password, $dbname);
//Checkconnection
if($conn->connect_error){
    die("Connectionfailed:".$conn->connect_error);
}

//sqltocreatetable
$sql= "CREATETABLEMyGuests(
idINT(6)UNSIGNEDAUTO_INCREMENTPRIMARYKEY,
firstnameVARCHAR(30)NOT NULL,
```

```
lastnameVARCHAR(30)NOTNULL,
email VARCHAR(50),
reg dateTIMESTAMPDEFAULTCURRENT TIMESTAMPONUPDATE
CURRENT TIMESTAMP
)";
if($conn->query($sql) ===TRUE){
 echo"TableMyGuestscreatedsuccessfully";
}else{
 echo "Errorcreatingtable: ".$conn->error;
$conn->close();
Example(MySQLiProcedural)
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDB";
//Createconnection
$conn=mysqli connect($servername,$username,$password,$dbname);
//Checkconnection if
(!$conn) {
 die("Connectionfailed:". mysqli_connect_error());
//sqltocreatetable
$sql= "CREATETABLEMyGuests(
idINT(6)UNSIGNEDAUTO_INCREMENTPRIMARYKEY,
firstnameVARCHAR(30)NOTNULL,
lastname VARCHAR(30) NOT NULL,
email VARCHAR(50),
reg_dateTIMESTAMPDEFAULTCURRENT_TIMESTAMPONUPDATE
CURRENT_TIMESTAMP
)";
if(mysqli_query($conn,$sql)){
 echo"TableMyGuestscreatedsuccessfully";
}else{
 echo"Errorcreatingtable:". mysqli_error($conn);
mysqli_close($conn);
?>
PHPMySQLInsertData
InsertDataIntoMySQLUsingMySQLiand PDO
Afteradatabaseandatablehavebeencreated, we can start adding data in them. Here are
some syntax rules to follow:
```

- TheSQLquerymustbequotedinPHP
- Stringvalues insidetheSQLquerymustbequoted
- Numeric values must not be quoted
- ThewordNULL mustnotbequoted

The INSERTINTO statement is used to add new records to a MySQL table:

INSERT INTO table_name (column1, column2, column3,...)

VALUES(value1, value2, value3,...)

TolearnmoreaboutSQL, pleasevisitourSQLtutorial.

In the previous chapter we created an empty table named "MyGuests" with five columns:

 $"id", "firstname", "lastname", "email" and "reg_date". Now, let us fill the table with data.\\$

Note: If a column is AUTO_INCREMENT (like the "id" column) or TIMESTAMP with default updateofcurrent_timesamp (like the "reg_date"column), it is no need to be specified in the SQL query; MySQL will automatically add the value.

The following examples add a new record to the "MyGuests" table:

Example(MySQLiObject-oriented)

```
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDB";
//Createconnection
$conn=newmysqli($servername,$username,$password, $dbname);
//Checkconnection
if($conn->connect error){
 die("Connectionfailed:".$conn->connect_error);
$sql="INSERTINTOMyGuests(firstname, lastname,email)
VALUES ('John', 'Doe', 'john@example.com')";
if ($conn->query($sql) === TRUE) {
 echo"Newrecordcreatedsuccessfully";
 echo"Error:".$sql."<br>".$conn->error;
$conn->close();
Insert Multiple Records Into MySQLUsing MySQLi and PDO\\
MultipleSOL statements must be executed with the mysgli multi query () function.
```

ManuplesQEstatementsmust beexecutedwiththemysqn_manu_query

$The following examples add three new records to the ''My Guests'' \ table:$

```
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDB";
//Createconnection</pre>
```

```
$conn=newmysqli($servername, $username,$password, $dbname);
//Checkconnection
if($conn->connect error){
 die("Connectionfailed:".$conn->connect_error);
}
$sql="INSERTINTOMyGuests(firstname, lastname,email)
VALUES ('John', 'Doe', 'john@example.com');";
$sql.="INSERTINTOMyGuests(firstname, lastname,email)
VALUES ('Mary', 'Moe', 'mary@example.com');";
$sql.="INSERTINTOMyGuests(firstname, lastname,email)
VALUES ('Julie', 'Dooley', 'julie@example.com')";
if($conn->multi_query($sql)===TRUE){ echo
 "New records created successfully";
}else{
 echo"Error:".$sql."<br>".$conn->error;
$conn->close();
```

NotethateachSQLstatementmustbeseparated by a semicolon.

PHPMySQLSelectData

SelectDataFromaMySQLDatabase

The SELECT statement is used to select data from one or more tables:SELECT column_name(s)FROMtable_nameorwecanusethe*characterto select ALLcolumns from a table:

SELECT *FROMtable_name

TolearnmoreaboutSQL, pleasevisitourSQLtutorial.

Select Data WithMySQLi

The following examples elects theid, first name and last name columns from the MyGuests table and displays it on the page:

```
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDB";

//Createconnection
$conn=newmysqli($servername,$username,$password, $dbname);
//Checkconnection
if($conn->connect_error){
    die("Connectionfailed:".$conn->connect_error);
}

$sql="SELECTid,firstname,lastnameFROMMyGuests";
$result=$conn->query($sql); if

($result->num_rows > 0) {
```

```
//outputdataofeachrow
 while($row=$result->fetch_assoc()){
  echo "id:". $row["id"]."-Name:". $row["firstname"]. "".$row["lastname"]."<br/>;
}else{
 echo"0results";
$conn->close();
Runexample»
```

id: 1 - Name: John Doeid: 2 - Name: Mary Moe id:3-

Name:JulieDooley

PHPMySQLDeleteData

Delete Data From a MySQL Table Using MySQLi and PDO

The DELETE statement is used to deletere cords from a table:

DELETE FROM table name

WHEREsome column=some value

NoticetheWHERE clause in the DELETE syntax: The WHERE clauses pecifies which recordorrecordsthatshouldbedeleted. If you omit the WHERE clause, all records will be deleted!

TolearnmoreaboutSQL,pleasevisit our SQLtutorial.Let's

look at the "MvGuests" table:

Id	firstname	lastname	email	reg_date
1	John	Doe	john@example.com	2014-10-2214:26:15
2	Mary	Moe	mary@example.com	2014-10-2310:22:30
3	Julie	Dooley	julie@example.com	2014-10-2610:48:23

The following examples delete the record with id=3 in the "MyGuests" table:

```
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDB";
//Createconnection
$conn=newmysqli($servername, $username,$password, $dbname);
//Checkconnection
if($conn->connect_error){
 die("Connectionfailed:".$conn->connect_error);
}
//sqltodeletearecord
$sql= "DELETEFROMMyGuestsWHEREid=3";
if($conn->query($sql)===TRUE){
 echo"Recorddeletedsuccessfully";
 echo"Errordeletingrecord:".$conn->error;
```

```
$conn->close();
?>
PHPMySQLUpdate Data
UpdateDataInaMySQLTable Using MySQLiandPDO
TheUPDATEstatement isusedtoupdateexistingrecordsinatable: UPDATE
table_name
SETcolumn1=value,column2=value2,...
WHERE some_column=some_value
```

Notice the WHERE clause in the UPDATE syntax: The WHERE clause specifies which recordorrecordsthatshouldbeupdated. Ifyouomit the WHERE clause, all records will be updated!

TolearnmoreaboutSQL,pleasevisit our <u>SQLtutorial</u>.Let's

look at the "MyGuests" table:

id	firstname	lastname	email	reg_date
1	John	Doe	john@example.com	2014-10-2214:26:15
2	Mary	Moe	mary@example.com	2014-10-2310:22:30

The following example supdate the record with id=2 in the "MyGuests" table:

```
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDB";
//Createconnection
$conn=newmysqli($servername,$username,$password, $dbname);
//Checkconnection
if($conn->connect_error){
 die("Connectionfailed:".$conn->connect error);
}
$sql="UPDATEMyGuestsSETlastname='Doe'WHERE id=2"; if
(\text{sonn->query}(\text{sql}) === TRUE) 
 echo"Recordupdatedsuccessfully";
 echo"Errorupdatingrecord:". $conn->error;
$conn->close();
?>
Example(PDO)
<?php
$servername="localhost";
$username="username";
$password="password";
$dbname="myDBPDO"; try
```

```
$conn=newPDO("mysql:host=$servername;dbname=$dbname",$username,$password);
//setthePDO errormodetoexception
$conn->setAttribute(PDO::ATTR_ERRMODE,PDO::ERRMODE_EXCEPTION);

$sql="UPDATE MyGuestsSETlastname='Doe'WHEREid=2";

//Preparestatement
$stmt=$conn->prepare($sql);

//executethe query
$stmt->execute();

//echoamessageto saytheUPDATEsucceeded
echo$stmt->rowCount()."recordsUPDATEDsuccessfully";
}catch(PDOException$e){
    echo$sql."<br/>br>".$e->getMessage();
}

$conn= null;
?>
```

After therecordisupdated, the table will look like this:

Id	firstname	lastname	email	reg_date
1	John	Doe	john@example.com	2014-10-2214:26:15
2	Mary	Doe	mary@example.com	2014-10-2310:22:30

RESULT:

Prepared Designa Student Profile Data Management Systemfor acollege. Createa Database and its associated tables successfully.

Task3: Develop aPHPapplication andrun itwith acommand-lineinterpreter

PHP is an open source server side scripting Language which originally stood for '**Personal HomePage**'nowstandsfor'**PHP: Hypertext Preprocessor**', whichisarecursiveacronym. It is a cross platformscripting language which is highly influenced by C, C++ and Java.



RunPHP CodesinLinuxCommandLine-Part1

A PHP Syntax is very similar to Syntax in C, Java and Perl Programming Language with a few PHP-specific feature. PHP is used bysome **260 Million** websites, as ofnow. The current stable release is PHP Version **5.6.10**.

PHP is HTML embedded script which facilitates developers to write dynamically generated pages quickly. PHP is primarily used on Server-side (and JavaScript on Client Side) to generatedynamicwebpagesoverHTTP, however youwillbesurprisedtoknowthat youcan execute a PHP in a Linux Terminal without the need of a web browser.

This article aims at throwing light on the command-line aspect of PHPs cripting Language.

 $\textbf{1.}\ After \textbf{PHP} and \textbf{Apache2} in stall at ion, we need to install PHP command Line Interpreter.$

#apt-getinstallphp5-cli #
yum install php-cli

[**Debian**andalikeSystem) [**CentOS**andalikeSystem)

Nextthing,we do is to testaphp(if installedcorrectly ornot) commonly asby creating file infophp.phpat location '/var/www/html' (Apache2 working directory in most of the distros), with the content <?php phpinfo(); ?>, simply by running the below command.

#echo'<?phpphpinfo();?>'>/var/www/html/infophp.php

andthenpointyourbrowserto http://127.0.0.1/infophp.phpwhichopensthisfileinweb browser.

PHP Version 5.6.9-0+deb8u1 Linux deb 3.16.0-4-amd64 #1 SMP Debian 3.16.7-ckt11-1 (2015-05-24) x86-64 System **Build Date** Jun 5 2015 13:03:32 Server API Apache 2.0 Handler Virtual Directory Support disabled Configuration File (php.ini) Path /etc/php5/apache2 **Loaded Configuration File** /etc/php5/apache2/php.ini Scan this dir for additional ini files /etc/php5/apache2/conf.d. Additional .ini files parsed /etc/php5/apache2/conf.d/05-opcache.ini, /etc/php5/apache2/conf.d/10-pdo.ini, /etc/php5/apache2/conf.d/20-json.ini, /etc/php5/apache2/conf.d/20-mysql.ini, /etc/php5/apache2/conf.d/20-mysql.ini, /etc/php5/apache2/conf.d/20-pdo_mysql.ini, /etc/php5/apache2/conf.d/20-readline.ini

CheckPHP Info

Same results can be obtained from the Linux terminal without the need of any browser. Run the PHP file located at '/var/www/html/infophp.php' in Linux Command Line as:

php-f/var/www/htm

```
File Edit View Search Terminal Help
_SERVER["SCRIPT_FILENAME"] => /var/www/html/infophp.php
_SERVER["PATH_TRANSLATED"] => /var/www/html/infophp.php
SERVER["DOCUMENT_ROOT"] =>
SERVER["REQUEST_TIME_FLOAT"] => 1436341155.45
SERVER["REQUEST TIME"] => 1436341155
 SERVER["argv"] => Array
    [0] => /var/www/html/infophp.php
_SERVER["argc"] => 1
PHP License
This program is free software; you can redistribute it and/or modify
it under the terms of the PHP License as published by the PHP Group
and included in the distribution in the file: LICENSE
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
If you did not receive a copy of the PHP license, or have any
questions about PHP licensing, please contact license@php.net.
avi@deb:~$
l/infophp.php
```

CheckPHPinfofromCommandline

Since the output is too big we can pipeline the above output with 'less' command to get one screen output at a time, simply as:

#php -f/var/www/html/infophp.php |less

```
File Edit View Search Terminal Help
phpinfo()
PHP Version => 5.6.9-0+deb8u1
System => Linux deb 3.16.0-4-amd64 #1 SMP Debian 3.16.7-cktll-1 (2015-05-24) x86
64
Build Date => Jun 5 2015 11:02:42
Server API => Command Line Interface
Virtual Directory Support => disabled
Configuration File (php.ini) Path => /etc/php5/cli
Loaded Configuration File => /etc/php5/cli/php.ini
Scan this dir for additional .ini files => /etc/php5/cli/conf.d
Additional .ini files parsed => /etc/php5/cli/conf.d/05-opcache.ini,
/etc/php5/cli/conf.d/10-pdo.ini,
/etc/php5/cli/conf.d/20-json.ini,
/etc/php5/cli/conf.d/20-mysql.ini,
/etc/php5/cli/conf.d/20-mysqli.ini,
/etc/php5/cli/conf.d/20-pdo_mysql.ini,
/etc/php5/cli/conf.d/20-readline.ini
PHP API => 20131106
PHP Extension => 20131226
Zend Extension \Rightarrow 220131226
Zend Extension Build => API220131226,NTS
```

CheckAllPHPInfo

HereOption'-f'parseand executethefilethatfollowsthecommand.

2. We can use phpin fo () which is a very valuable debugging to oldirectly on the Linux command-line without the need of calling it from a file, simply as:

```
#php-r'phpinfo();'
```

```
File Edit View Search Terminal Help
 SERVER["SCRIPT FILENAME"] =>
 SERVER["PATH TRANSLATED"] =>
 SERVER["DOCUMENT ROOT"] =>
 SERVER["REQUEST_TIME_FLOAT"] => 1436341458.2018
 SERVER["REQUEST_TIME"] => 1436341458
 SERVER["argy"] => Array
    [0] \implies -
 SERVER["argc"] => 1
PHP License
This program is free software; you can redistribute it and/or modify it under the terms of the PHP License as published by the PHP Group
and included in the distribution in the file: LICENSE
This program is distributed in the hope that it will be useful,
but WITHOUT ANY WARRANTY; without even the implied warranty of
MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE.
If you did not receive a copy of the PHP license, or have any
questions about PHP licensing, please contact license@php.net.
avi@deb:~$
```

PHPDebuggingTool

Heretheoption'-r'runthePHPCode inthe LinuxTerminaldirectlywithouttags<and>.

3. Run PHPin Interactive mode and do some mathematics. Here option '-a' is for running PHP in Interactive Mode.

```
# php -a
Interactive shell
php>echo2+3; 5
php>echo9-6; 3
php>echo5*4;
20
php>echo12/3; 4
php>echo12/5;
2.4
php>echo2+3-1; 4
php>echo2+3-1*3; 2
php> exit
```

Press'exit'or 'ctrl+c'toclosePHPinteractivemode.

```
File Edit View Search Terminal Help

avi@deb:-$ php -a
Interactive mode enabled

php > echo 2+3;
5
php > echo 9-6;
3
php > echo 5*4;
20
php > echo 12/3;
4
php > echo 12/5;
2.4
php > echo 2+3-1;
4
php > echo 2+3-1;
5
php > echo 2+3-1*4/2;
3
php > echo 2+3-1*4/2;
3
php > [5]+ Stopped php -a
avi@deb:-$
```

EnablePHPInteractiveMode

4. You can run a PHP script simply as, if it is a shell script. FirstCreate a PHP sample script in your current working directory.

```
#echo-e'#!/usr/bin/php\n<?phpphpinfo();?>'>phpscript.php
```

Noticeweused#!/usr/bin/phpinthe first lineofthisPHPscript asweuseto do inshellscript (/bin/bash). The first line#!/usr/bin/phptells the Linux Command-Line to parse this script file to PHP Interpreter.

Secondmakeitexecutableas:

```
#chmod 755 phpscript.php
```

andrunitas,

#./phpscript.php

5. Youwillbesurprisedtoknowyoucancreatesimplefunctionsallbyyourselfusingthe interactive shell. Here is the step-by step instruction. StartPHPinteractivemode.

```
# php-a
```

Createafunctionandnameitaddition. Alsodeclaretwovariables \$a and \$b.

```
php >functionaddition($a,$b)
```

Usecurlybracesto define rulesin betweenthemforthisfunction.

```
php> {
```

DefineRule(s). Heretherule saytoaddthe two variables.

php{ echo\$a+\$b;

Module4:Task:ImplementaneffectiveLoggingSystemusingfilesinPHP.

CREATE TABLEusers(idINT NOT NULL PRIMARY KEY AUTO_INCREMENT,

username VARCHAR(50) NOT NULL UNIQUE, password VARCHAR(255) NOT NULL, created_at DATETIME DEFAULT CURRENT_TIMESTAMP);

```
Step1:CreatingtheDatabaseTable
```

Executethe following SQL query to create the *users* table inside your MySQL database.

CREATE TABLE users (

idINTNOTNULLPRIMARYKEYAUTO_INCREMENT, username VARCHAR(50) NOT NULL UNIQUE,

passwordVARCHAR(255)NOT NULL,

 $created_atDATETIMEDEFAULTCURRENT_TIMESTAMP$

);

Pleasecheckoutthetutorialon<u>SQL</u>CREATE TABLE<u>statement</u>forthedetailed information about syntax for creating tables in MySQL database system.

Step2:CreatingtheConfigFile

After creating the table, we need create a PHP script in order to connect to the MySQL databaseserver.Let'screateafile named"config.php"andputthefollowingcodeinside it.

<?php

/*Databasecredentials.AssumingyouarerunningMySQL server with default setting (user 'root' with no password) */

define('DB SERVER', 'localhost');

define('DB_USERNAME', 'root');

define('DB PASSWORD', ");

define('DB_NAME','demo');

/*AttempttoconnecttoMySQLdatabase*/

```
$link=mysqli_connect(DB_SERVER,DB_USERNAME,DB_PASSWORD,DB_NAME);
//Checkconnection
if($link===false){
  die("ERROR:Couldnotconnect.". mysqli_connect_error());
?>
Step3:CreatingtheRegistrationForm
Let'screateanotherPHPfile"register.php"andputthe followingexamplecodeinit. This example
code will create a web form that allows user to register themselves.
This script will also generate errors if ausertries to submit the form without entering any value, or
if username entered by the user is already taken by another user.
<?php
// Include config file
require_once"config.php";
//Definevariablesandinitializewithemptyvalues
$username=$password =$confirm_password="";
$username_err=$password_err=$confirm_password_err="";
// Processing form data when form is submitted
if($_SERVER["REQUEST_METHOD"]=="POST"){
  // Validate username
  if(empty(trim($ POST["username"]))){
    $username_err ="Pleaseenterausername.";
  }elseif(!preg_match('/^[a-zA-Z0-9_]+$/',trim($_POST["username"]))){
    $username_err="Usernamecanonlycontainletters,numbers, and underscores.";
  }else{
    //Prepareaselectstatement
    $sql="SELECT idFROMusersWHEREusername=?";
    if($stmt = mysqli_prepare($link, $sql)){
       //Bind variables to the prepared statement as parameters
       mysqli_stmt_bind_param($stmt,"s",$param_username);
       //Setparameters
       $param_username=trim($_POST["username"]);
       //Attempttoexecutethepreparedstatement
       if(mysqli stmt execute($stmt)){
         /* store result */
         mysgli stmt store result($stmt);
         if(mysqli_stmt_num_rows($stmt)==1){
           $username_err ="Thisusernameisalreadytaken.";
         }else{
           $username=trim($_POST["username"]);
       }else{
            echo"Oops!Somethingwentwrong.Pleasetryagainlater.";
       // Close statement
       mysqli_stmt_close($stmt);
    }
```

```
// Validate password
  if(empty(trim($_POST["password"]))){
      $password_err ="Pleaseenterapassword.";
   }elseif(strlen(trim($_POST["password"])) <6){</pre>
      $password_err="Passwordmusthaveatleast6characters.";
   }else{
     $password=trim($_POST["password"]);
  // Validate confirm password
  if(empty(trim($_POST["confirm_password"]))){
    $confirm password err="Pleaseconfirmpassword.";
  }else{
    $confirm_password = trim($_POST["confirm_password"]);
    if(empty($password_err)&&($password!=$confirm_password)){
      $confirm_password_err = "Passworddidnotmatch.";
    }
  // Check input errors before inserting in database
  if(empty($username_err)&&empty($password_err)&&
empty($confirm_password_err)){
      //Preparean insertstatement
    $sql="INSERTINTOusers(username, password)VALUES(?,?)";
    if($stmt = mysqli_prepare($link, $sql)){
      // Bind variables to the prepared statement as parameters
      mysqli_stmt_bind_param($stmt,"ss",$param_username,$param_password);
      //Setparameters
       $param_username=$username;
       $param_password=password_hash($password,PASSWORD_DEFAULT);// Creates
a password hash
      //Attempttoexecutethepreparedstatement
      if(mysqli_stmt_execute($stmt)){
         // Redirect to login page
         header("location:login.php");
         echo"Oops!Somethingwentwrong.Pleasetryagainlater.";
      // Close statement
       mysqli stmt close($stmt);
  // Close connection
  mysqli_close($link);
?>
<!DOCTYPEhtml>
<htmllang="en">
<head>
  <metacharset="UTF-8">
  <title>SignUp</title>
```

```
<link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
  <style>
    body{font:14pxsans-serif;}
    .wrapper{width:360px;padding:20px;}
</head>
<body>
   <divclass="wrapper">
     <h2>SignUp</h2>
    Pleasefillthisformtocreate anaccount.
    <formaction="<?phpechohtmlspecialchars($_SERVER["PHP_SELF"]);?>" method="post">
       <divclass="form-group">
         <label>Username</label>
         <input type="text" name="username" class="form-control <?php echo</pre>
(!empty($username_err)) ?'is-invalid':";?>"value="<?phpecho $username;?>">
         <spanclass="invalid-feedback"><?phpecho $username_err;?></span>
       </div>
       <divclass="form-group">
         <label>Password</label>
         <inputtype="password"name="password"class="form-control<?phpecho</pre>
(!empty($password_err)) ? 'is-invalid' : "; ?>" value="<?php echo $password; ?>">
         <spanclass="invalid-feedback"><?phpecho$password_err;?></span>
       </div>
       <divclass="form-group">
         <label>ConfirmPassword</label>
         <inputtype="password"name="confirm_password"class="form-control<?php echo</pre>
(!empty($confirm_password_err)) ? 'is-invalid' : "; ?>" value="<?php echo
$confirm_password;?>">
         <spanclass="invalid-feedback"><?phpecho$confirm_password_err;?></span>
       </div>
       <divclass="form-group">
         <inputtype="submit"class="btnbtn-primary"value="Submit">
         <inputtype="reset"class="btnbtn-secondaryml-2" value="Reset">
       </div>
       Alreadyhaveanaccount?<ahref="login.php">Loginhere</a>.
    </form>
  </div>
</body>
</html>
Step4:Creating theLoginForm
Let'screateafilenamed"login.php"andplacethefollowingcodeinsideit.
<?php
//Initializethesession
session start();
//Check iftheuser isalreadylogged in, if yesthenredirect himtowelcomepage
if(isset($_SESSION["loggedin"]) && $_SESSION["loggedin"] === true){
```

```
header("location:welcome.php");
  exit;
}
// Include config file
require_once"config.php";
//Definevariablesandinitializewithemptyvalues
$username =$password= "";
$username_err=$password_err=$login_err="";
// Processing form data when form is submitted
if(SSERVER["REQUEST\_METHOD"] == "POST"){
  // Check if username is empty
  if(empty(trim($_POST["username"]))){
    $username_err="Pleaseenter username.";
  }else{
    $username=trim($_POST["username"]);
  // Check if password is empty
  if(empty(trim($_POST["password"]))){
    $password_err="Pleaseenteryour password.";
  }else{
    $password=trim($_POST["password"]);
  //Validate credentials
  if(empty($username_err)&&empty($password_err)){
    //Prepareaselectstatement
    $sql="SELECT id,username,passwordFROMusersWHEREusername=?";
    if($stmt = mysqli_prepare($link, $sql)){
       //Bind variables to the prepared statement as parameters
       mysqli_stmt_bind_param($stmt,"s",$param_username);
       //Setparameters
       $param_username=$username;
       //Attempttoexecutethepreparedstatement
       if(mysqli stmt execute($stmt)){
         // Store result
         mysqli_stmt_store_result($stmt);
         //Check ifusernameexists, if yesthen verify password if (mysqli stmt num rows ($stmt)
         == 1){
           //Bindresultvariables
           mysqli_stmt_bind_result($stmt,$id,$username,$hashed_password);
           if(mysqli stmt fetch($stmt)){
              if(password_verify($password,$hashed_password)){
            //Passwordiscorrect,sostartanewsession session start();
                //Storedatainsessionvariables
                $ SESSION["loggedin"]=true;
```

```
$_SESSION["id"]=$id;
                $_SESSION["username"]=$username;
                // Redirect user to welcome page
                header("location:welcome.php");
              }else{
                //Passwordisnotvalid,displayagenericerrormessage
                $login_err="Invalidusernameorpassword.";
         }else{
           //Usernamedoesn'texist,displayagenericerrormessage
           $login_err="Invalidusernameorpassword.";
       }else{
           echo"Oops!Somethingwentwrong.Pleasetryagainlater.";
       // Close statement
       mysqli_stmt_close($stmt);
  // Close connection
  mysqli_close($link);
?>
<!DOCTYPEhtml>
<htmllang="en">
<head>
  <metacharset="UTF-8">
  <title>Login</title>
  <link rel="stylesheet"</pre>
href="https://stackpath.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
  <style>
    body{font:14pxsans-serif;}
    .wrapper{width:360px;padding:20px;}
  </style>
</head>
<body>
  <divclass="wrapper">
     <h2>Login</h2>
      Please fillinyourcredentialstologin.
    <?php
    if(!empty($login_err)){
       echo'<divclass="alertalert-danger">'.$login_err.'</div>';
     }
    ?>
    <formaction="<?phpechohtmlspecialchars($_SERVER["PHP_SELF"]);?>" method="post">
```

```
<divclass="form-group">
         <label>Username</label>
         <input type="text" name="username" class="form-control <?php echo</pre>
(!empty($username_err))?'is-invalid':";?>"value="<?phpecho$username;?>">
         <spanclass="invalid-feedback"><?phpecho $username_err;?></span>
       </div>
       <divclass="form-group">
         <label>Password</label>
         <inputtype="password"name="password"class="form-control<?phpecho</pre>
(!empty($password_err)) ? 'is-invalid' : "; ?>">
         <spanclass="invalid-feedback"><?phpecho$password_err;?></span>
      </div>
       <divclass="form-group">
         <inputtype="submit"class="btnbtn-primary"value="Login">
       Don'thaveanaccount?<ahref="register.php">Signupnow</a>.
    </form>
  </div>
</body>
</html>
```

—Theoutputoftheaboveexample(i.e. loginform)willlooksomethinglikethis:

Login
Please fill in your credentials to login.
Username
Password
Login Don't have an account? Sign up now.

Output

ImplementaneffectiveLoggingSystemusingfiles inPHPsuccessfullycompleted

Task5:DevelopanAddStudent ProfilePagewhichacceptsallstudentdetailsincluding photo and display them in order.

htmlcodeforstudent registration form

Here is an example of html code for student registration form. In this example, we have displayed manytext fields,radio button,ResetbuttonandSubmit Formbutton.Wehaveused Reset button that resets all fields to blank. We have used JavaScript validation in student registration form. If you will not enter value in text field thanan error message will be show. In this example we have made entry in every fieldmandatory hence an error is shown if one ofthem is not filled correctly. However, a programmer can make adjust it accordingly.

When all fields are filled correctly, submit form adds the data. A programmer can use this submit form as he/she wants, either they can send/redirect it to other page or save it in database.

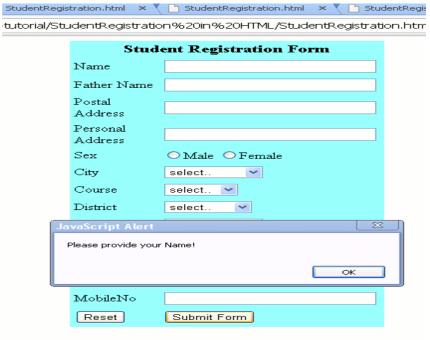
StudentRegistration.html

```
Name
<inputtype=textname=textnamesid="textname"size="30">
Father Name
<inputtype="text"name="fathername"id="fathername" size="30">
>
PostalAddress
<inputtype="text"name="paddress"id="paddress"size="30">
PersonalAddress
<inputtype="text"name="personaladdress"
id="personaladdress" size="30">
Sex
<inputtype="radio"name="sex"value="male"size="10">Male
<inputtype="radio"name="sex"value="Female"size="10">Female
\langle tr \rangle
City
<selectname="City">
<optionvalue="-1"selected>select..
<optionvalue="NewDelhi">NEWDELHI</option>
<optionvalue="Mumbai">MUMBAI</option>
<optionvalue="Goa">GOA</option>
<optionvalue="Patna">PATNA</option>
</select>
Course
<course">
<optionvalue="-1"selected>select..
<optionvalue="B.Tech">B.TECH</option>
<optionvalue="MCA">MCA</option>
<optionvalue="MBA">MBA</option>
<optionvalue="BCA">BCA</option>
</select>
```

```
District
<selectname="District">
<optionvalue="-1"selected>select..
<optionvalue="Nalanda">NALANDA</option>
<optionvalue="UP">UP</option>
<optionvalue="Goa">GOA</option>
<optionvalue="Patna">PATNA</option>
</select>
State
<selectName="State">
<optionvalue="-1"selected>select..
<optionvalue="NewDelhi">NEWDELHI</option>
<optionvalue="Mumbai">MUMBAI</option>
<optionvalue="Goa">GOA</option>
<optionvalue="Bihar">BIHAR</option>
</select>
>
PinCode
="text"name="pincode"id="pincode"size="30">
EmailId
<inputtype="text"name="emailid"id="emailid"size="30">
DOB
<input type="text"name="dob"id="dob"size="30">
MobileNo
<inputtype="text"name="mobileno"id="mobileno"size="30">
<tdcolspan="2"><inputtype="submit"value="SubmitForm"/>
</form>
</body>
</html>
```

 $\langle tr \rangle$

OutPut:



Task6:Programon AddingTwoNumberusingFormsinPHP

```
<html>
<body>
<formmethod="post">
Enter First Number:
<inputtype="number"name="number1"/> <br> <br>
Enter Second Number:
<inputtype="number"name="number2"/> <br> <br>
<inputtype="submit"name="submit"value="Add">
</form>
<?php
  if(isset($_POST['submit']))
  {
    $number1=$_POST['number1'];
    $number2=$_POST['number2'];
    $sum=$number1+$number2;
echo"Thesumof $number1and$number2is:".$sum;
?>
</body>
```

</html>

OUT PUT

Programsuccessfullyexecuted

localhost	t/adding1.php/ x		
\leftarrow \rightarrow G	① localhost/adding1.php/		
Enter Fi	rst Number:		
Enter Se	econd Number:		
Add			

The sum of 56 and 89 is: 145

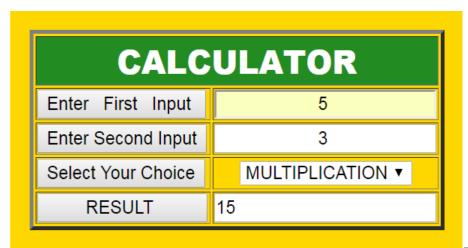
Task7:Towriteaprogramformathematical calculator.

```
PROGRAM:
 <?php
if(isset($_PO
      ST['di
sp']))
$f=$_POST['f'];
$s=$_POST['s'];
$ch=$_
POST['
ch'];
switch(
 $ch)
 case'ADDITION':
 $re
 s=$
 f+\$
 s;
 bre
 ak;
 case'SUBTRACTION':
 $re
  s=\$
 f-
  $s;
```

```
bre
ak;
case'MULTIPLICATION':
$re
s=\$
f*$
s;
bre
ak;
case'DIVISION':
$re
s=\$
f/\$s
bre
ak;
?>
<html>
<body>bgcolor="gold">
<formaction=""method="post">
<tablealign="center"border="3"width="20%"><br><br>
<trbgcolor="forestgreen"><tdalign="center"colspan="2">
<fontcolor="white"face="arialblack"size="5">CALCULATOR</font>
<inputtype="button"value="EnterFirstInput">
<input type="text"name="f">
<inputtype="button"value="EnterSecondInput">
<input type="text"name="s">
<center><selectname="ch">
<option>ADDITION</option>
<option>SUBTRACTION</option>
<option>MULTIPLICATION</option>
<option>DIVISION</option>
</re>
<inputtype="submit"value="RESULT"</td>
                                       "name="disp">
<inputtype="text"value="<?phpecho@$res;?>"readonly="true"/>
</body></html>
```

CALCULATOR		
Enter First Input	5	
Enter Second Input	5	
Select Your Choice	ADDITION ▼	
RESULT	10	

OUTPUT



Task:8Write a

PHP program about TRAVEL AGENCY WEBSITE

AGENCY.PHP

```
<html>
<frameset rows="30%,30%"border="0">
<framesrc="s11.php"noresize="noresize">
<framesetcols="30%,50%">
<framesrc="c12.php">
<framesrc="c13.php"name="content">
</frameset>
</frameset>
</html>
```

S11.PHP

```
<html><tabe>

  <
imgsrc="images.jpg"alt="HTML5Icon"style="width300px;height:200px;">

   <imgsrc="images(2).jpg"alt="HTML5Icon"style="width300px;height:200px;">

   <</td>
```

```
<imgsrc="images(3).jpg"alt="HTML5Icon"style="width300px;height:200px;">
 <imgsrc="images(4).jpg"alt="HTML5Icon"style="width300px;height:200px;">
 <divstyle="background-color:skyblue;color:white;font-size:20pt;text-align:center">
 <
 <ahref="c13.php"target="content">HOME</a>
 <ahref="c21.php"target="content">DOMESTICPACKAGE</a>
 <ahref="c3.php"target="content">GALLERY</a>
 </div>
 </body>
 </html>
C12.PHP
<html>
 <bgcolor="black">
 <
 <imgsrc="images.png"alt="HTML5Icon"style="width1000px;height:200px;">
 </font>
 </body>
 </html>
C13.PHP
 <html>
<body><br/>bodybgcolor="black"></br/>
 <fontcolor="yellow"face="ComicSansMS">
```

Late Haji Janab Allah Baksh was the founder and Chairman of AB Business Enterprises which started his whole journey with a singlet axiin the year 1967. [7] The brand Parveen was launched in the year 1980. [8]

Thecompanystarteditsjourneyasatraveloperator and has slowly embarked its presence in logistics, Manpower Consultancy, Fuel, Restaurants, Automobiles, Tourism, Driving academy and Automobile spare parts.[9][10][11][12]

ParveenLaunchedE-commercewebsitein2004.[13][14]

Parveen Travels had a First Mover advantage being the first to introduce online ticketing forintercityservice in 2004. [15] [16] In 2010, Parveen Travelsbecame the first owners of the Mercedes-Benz multi-axle buses in India. [17]

OnApril27,2010,ParveenTravelslaunchesbuswithfacilitiestoconductbusiness conferences while traveling in Chennai.[18][19][20]

```
</font>
</body>
</html>

C13.PHP

<html>
<bodybgcolor="black">
<fontcolor="yellow"face="ComicSansMS">
```

Late Haji Janab Allah Baksh was the founder and Chairman of AB Business Enterprises which started his whole journey with a single taxi in the year 1967.[7] The brand Parveen was launched in the year 1980.[8]

Thecompanystarteditsjourneyasatraveloperator and has slowly embarked its presence in logistics, Manpower Consultancy, Fuel, Restaurants, Automobiles, Tourism, Driving academy and Automobile spare parts.[9][10][11][12]

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In2010, Parveen Travelsbecamethe first owners of the Mercedes-Benz multi-axle buses in India. [17]

On April 27, 2010, Parveen Travels launches bus with facilities to conduct business conferences while traveling in Chennai. [18] [19] [20]

</body>
</html>

C21.PHP

```
<html>
<imgsrc="allappey2.jpg"alt="HTML5Icon"style="width300px;height:200px;">
Munnar & Alleppey
Package -03Nights-04Days<br>
<hrcolor=black>
Price perpersonfrom$192<br>
<hrsize=4>
Package Cost Category
Standard<br/>
<br/>
Category –
StandardPax1-3Pax4-6
<br/>br>Pax7-9Twinsharing More
info<br>
<inputtype="button"value="BOOKNOW"color="red">
</html>
 C<sub>3</sub>.PHP
<html><tabel>
 <imgsrc="images(5).jpg"alt="HTML5Icon"style="width300px;height:200px;">
<imgsrc="images(6).jpg"alt="HTML5Icon"style="width300px;height:200px;">
 <imgsrc="images(7).jpg"alt="HTML5Icon"style="width300px;height:200px;">
<imgsrc="images(8).jpg"alt="HTML5Icon"style="width300px;height:200px;">
<imgsrc="images(9).jpg"alt="HTML5Icon"style="width300px;height:200px;">
 </html>
```

<u>OUTPUTDESIGN</u>



HOME DOMESTIC PACKAGE GALLERY



Late Haji Janab Allah Baksh was the founder and Chairman of AB Business Enterprises which start.

The company started its journey as a travel operator and has slowly embarked its presence in low
Parveen Launched E-commerce website in 2004.[13][14]

Parveen Travels had a First Mover advantage being the first to introduce online ticketing for 1:
In 2010, Parveen Travels became the first owners of the Mercedes-Benz multi-axle buses in India
On April 27, 2010, Parveen Travels launches bus with facilities to conduct business conferences

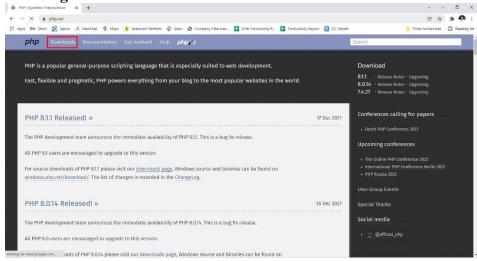
How to install PHP inWindowsOS

InstallingPHPonWindows:

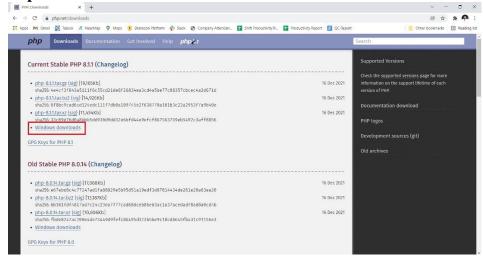
FollowthebelowstepstoinstallPHPonWindows:

Step1: Visithttps://www.php.net/websiteusinganywebbrowserandclickonDownloads.

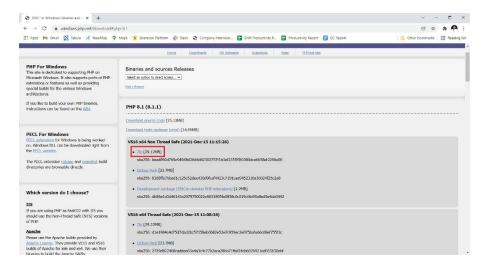
InstallingPHPonWindows:



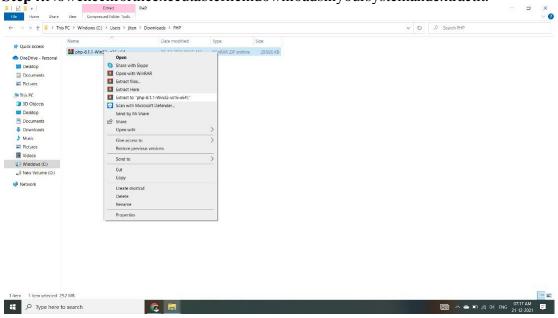
Step2:ClickontheWindows"Downloads"button.



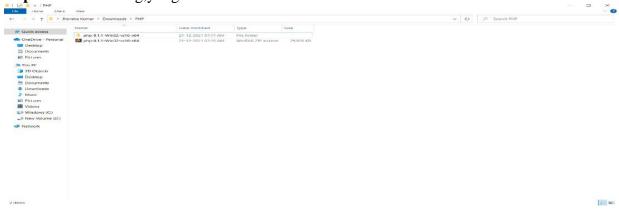
Step 3: The new webpage has different options, choose the Thread safe version, and click on the zip button and Download it.



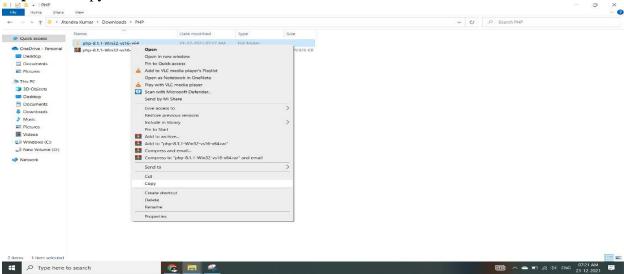
Step4:Nowcheckfortheexecutablefileindownloadsinyoursystemandextractit.



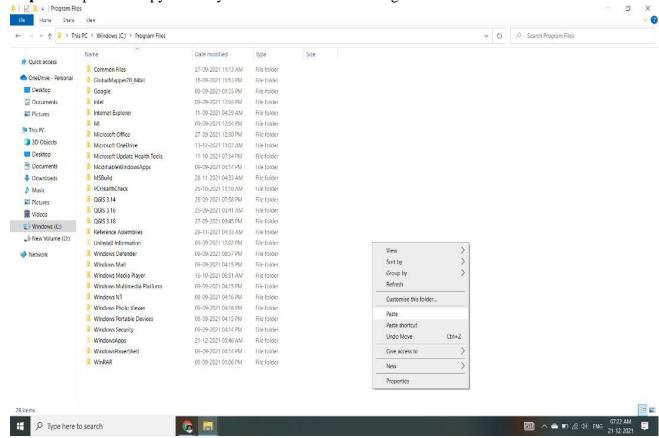
Step5: Afterextracting, youget the extracted folder.



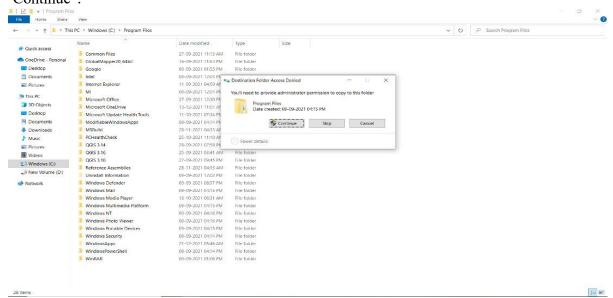
Step6:Nowcopytheextractedfolder.



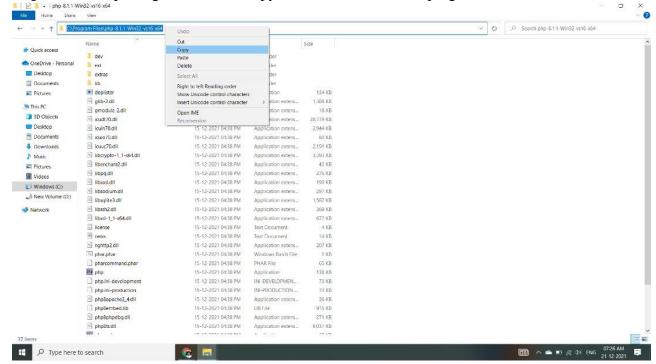
 ${\bf Step 7:} Now paste the copy folder in your windows drive in the Program files folder.$



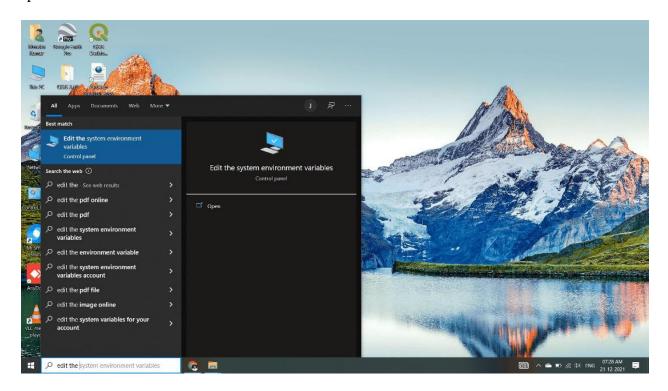
Step 8: Now the Permission Windows appears to paste the folder in program files then click on "Continue".



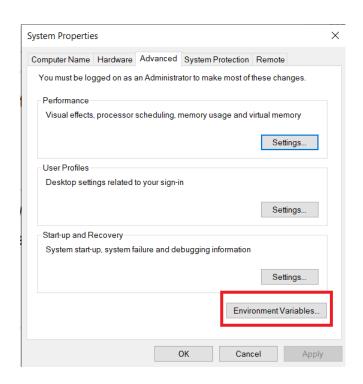
Step9:Nowafterpastingthefolderthencopytheaddressofthefolderinprogramfiles.



Step 10: Now click on Start Menu and search "Edit the system environment variables" and open it.

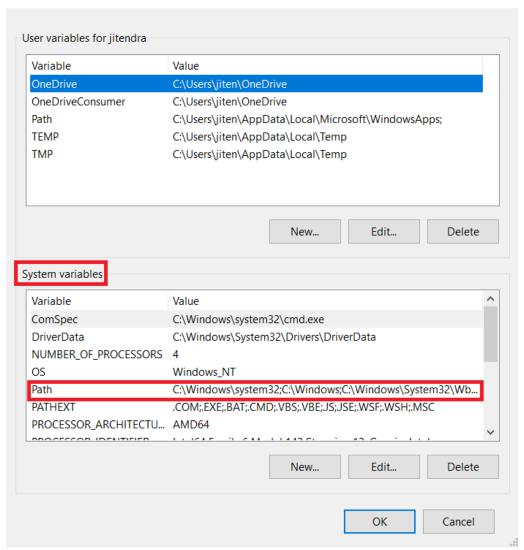


Step 11: After opening System, Variable New window appears, and click on "Environment Variables..."



Step 12: Nowgoto the "System variables" Patho ption and double click on Path.

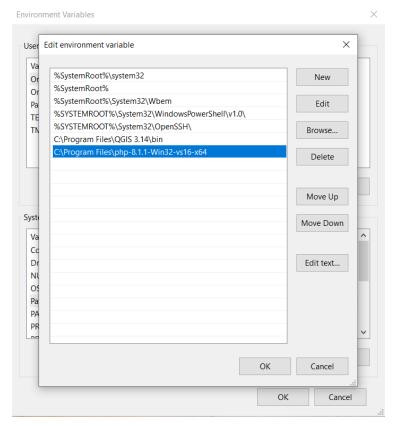
Environment Variables X



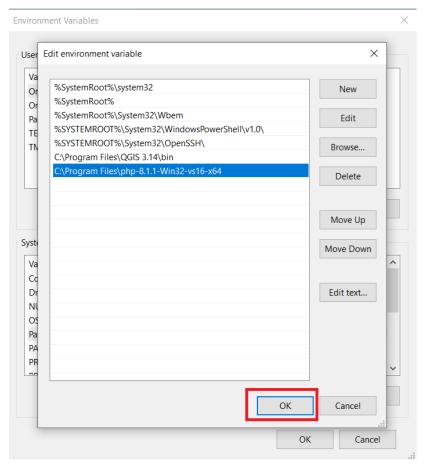
Edit environment variable %SystemRoot%\system32 New %SystemRoot% %SystemRoot%\System32\Wbem Edit $%SYSTEMROOT \% \system 32 \windows Power Shell \v1.0 \label{lem:system}$ %SYSTEMROOT%\System32\OpenSSH\ Browse... C:\Program Files\QGIS 3.14\bin Delete Move Up Move Down Edit text... ОК Cancel

Step13: Nextscreenwillopenandclickonthe "New" button.

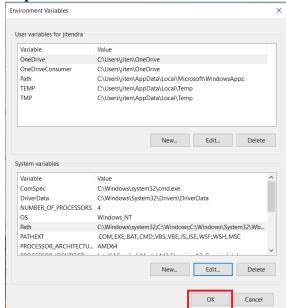
Step 14: After NewPaste the address we copy from program files to new and click on *Enter* button.



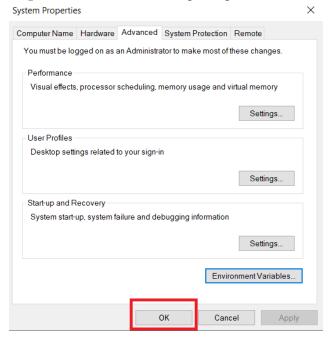
 ${\bf Step 15:} Now Click on the {\bf OK} button.$



Step16:ClickontheOKbutton.

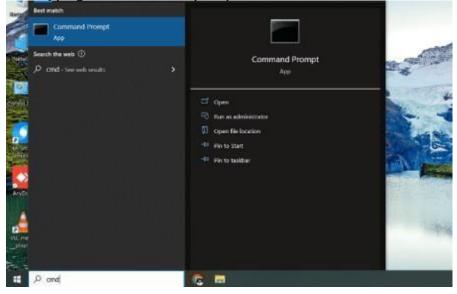


Step17:ClickonOKforsavingchanges.



Step 18: Now your PHP is installed on your computer. You may check by going to the "Start"

menu typing Command Prompt. Open it.



Step19:WhentheCommandPromptopens,type**php-v**

Command Prompt

```
Microsoft Windows [Version 10.0.19044.1415]
(c) Microsoft Corporation. All rights reserved.
C:\Users\jiten php -v
```

Step 20: Now enter the command prompt to show the version of PHP installed on your computer.

```
Microsoft Windows [Version 10.0.19044.1415]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jiten>php -v
PHP 8.1.1 (cli) (built: Dec 15 2021 10:31:43) (ZTS Visual C++ 2019 x64)

Copyright (c) The PHP Group
Zend Engine v4.1.1, Copyright (c) Zend Technologies

C:\Users\jiten>
```

Program;-1Givenprogramshowsthesumofdigitsof14597.

```
<?php
$num=14597;
$sum=0; $rem=0;
for($i=0; $i<=strlen($num);$i++)
{
    $rem=$num%10;
    $sum =$sum +$rem;
    $num=$num/10;
}
echo"Sum ofdigits14597 is $sum";</pre>
```

Program 2:-A Program to check1233456is odd/ even

```
<?php
1. $number=1233456;
2. if($number%2==0)
3. {
4. echo"$numberisEvenNumber";
5. }
6. else
7. {
8. echo"$numberisOddNumber";
9. }
10. ?>
```

Output:



1233456 is Even Number

Program:-3CheckPrimeNumber

```
<?php
$count =0;
$num=2;
while($count <15 )
{
    $div_count=0;
for($i=1; $i<=$num; $i++)
{
    if(($num%$i)==0)
{
    $div_count++;
}
}</pre>
```

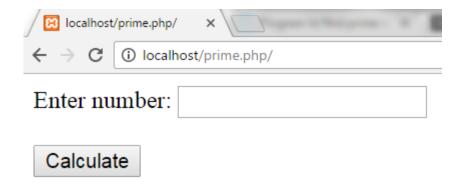
```
if($div_count<3)
{
  echo$num.", ";
  $count=$count+1;
}
$num=$num+1;
}
?>
OUTPUT
```

Program: -3.1Check PrimeNumberusing form

```
<formmethod="post">
EnteraNumber: <input type="text"name="input"><br><br>
<inputtype="submit"name="submit" value="Submit">
</form>
<?php
if($_POST)
{
  $input=$_POST['input'];
  for($i =2; $i<=$input-1;$i++){
   if($input %$i==0){
   $value=True;
   }
if(isset($value)&&$value){
  echo'TheNumber'. $input . 'is not prime';
}else{
 echo'TheNumber'. $input . 'is prime';
}
?>
```

Output:

Onenteringnumber 12, wegetthefollowingoutput. Itstates that 12 is not a prime number.



The Number 12 is not prime

Program4:-WriteaPHPProgramtocheckpalindromenumberornot

```
<\!\!formmethod \!\!=\! "post"\!\!>
EnteraNumber: <input type="text"name="num"/><br>
<buttontype="submit">Check</button>
</form>
<?php
  if($_POST)
  {
    //getthevaluefromform
    $num =$_POST['num'];
    //reversingthenumber
    $reverse=strrev($num);
    //checkingifthenumberand reverseis equal
    if($num==$reverse){
       echo"Thenumber$numis Palindrome";
       echo"Thenumber$numis not aPalindrome";
}
   ?>
```

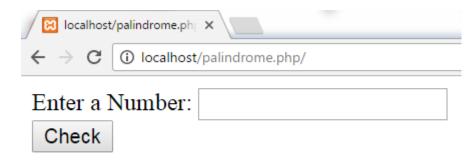
Output:

Onentering thenumber 23432, wegetthefollowing output.

localhost/palindrome.ph ×	
\leftarrow \rightarrow G	(i) localhost/palindrome.php/
Enter a l	Number:

The number 23432 is Palindrome

Onentering thenumber 12345, wegetthefollowing output.



The number 12345 is not a Palindrome

Program5:-WriteaPHP Program todisplaytheFibonacci series

```
<?php
$num=0;
$n1 =0;
$n2 =1;
echo"<h3>Fibonacciseriesforfirst12numbers:</h3>"; echo
"\n";
echo$n1.".$n2.";
while($num <10)
{
    $n3=$n2+$n1; echo
    $n3.';</pre>
```

```
$n1=$n2;
$n2=$n3;
$num =$num +1;
?>
```

Output:



Fibonacci series for first 12 numbers:

0 1 1 2 3 5 8 13 21 34 55 89