

Set Up Instruction for WAMP SERVER with Microsoft SQL Server

- If you have access to the Microsoft Imagine login with your college id:
<https://imagine.microsoft.com/en-us>
- Restore database in SQL Server 2016 or higher from Microsoft Imagine for full complete access.

See the detail instruction to install 2016 MS SQL Server with 2017 Visual Studio

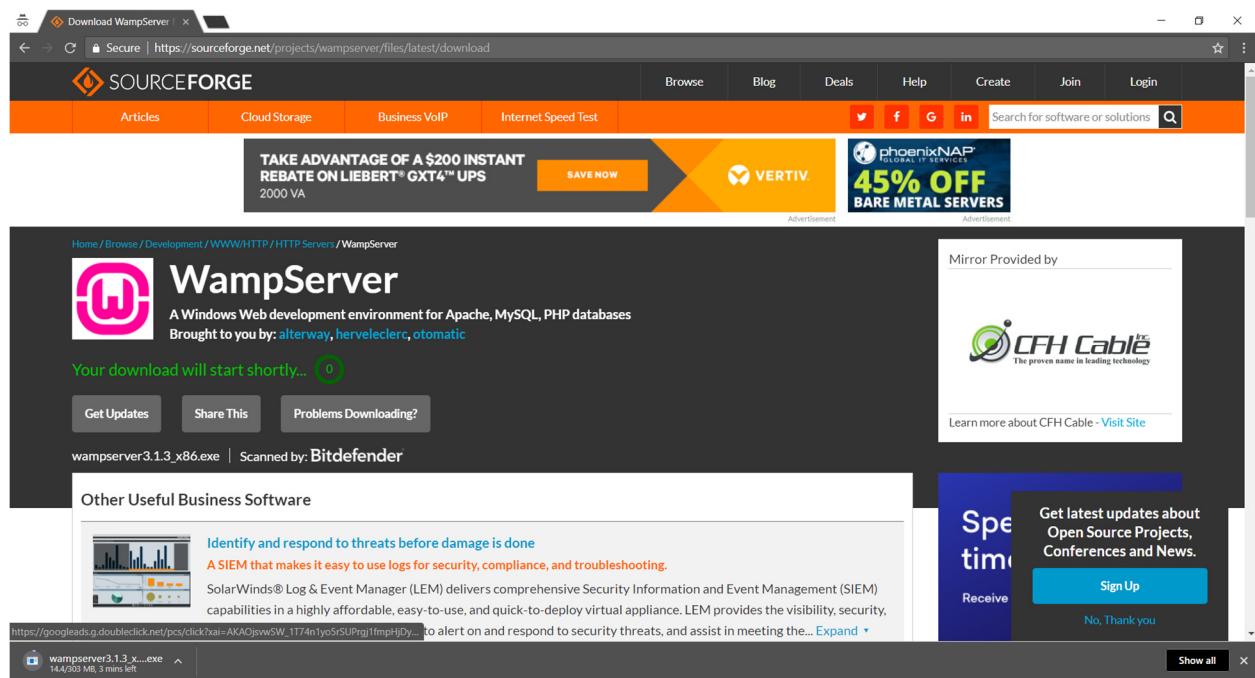
<http://eeecs.csuohio.edu/~sschung/cis430/CIS430.html#Lab>

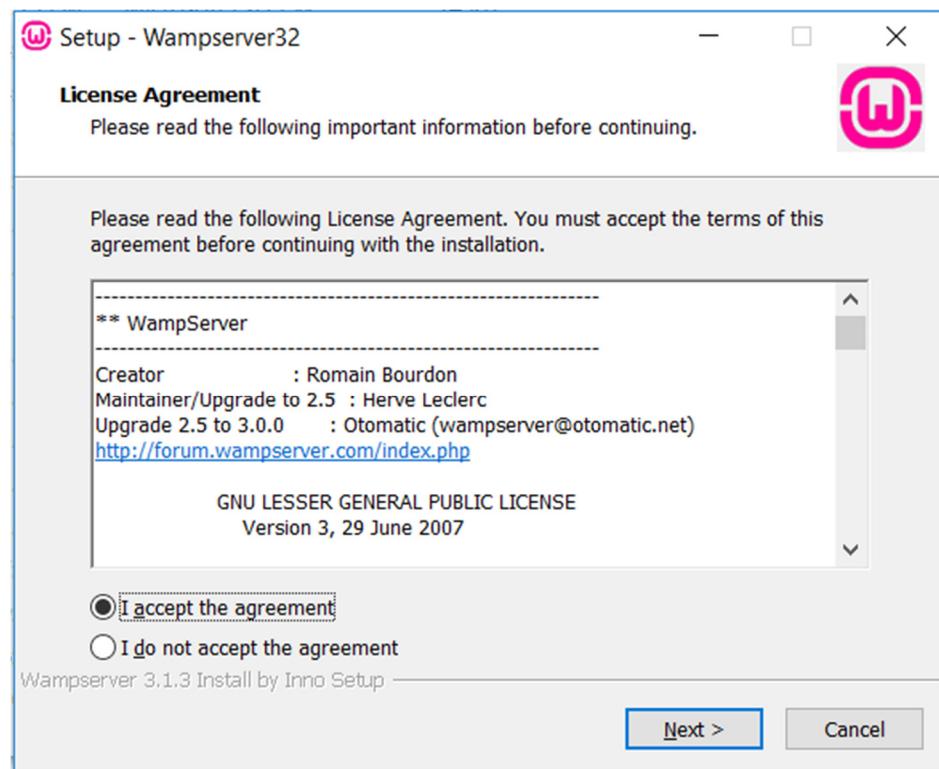
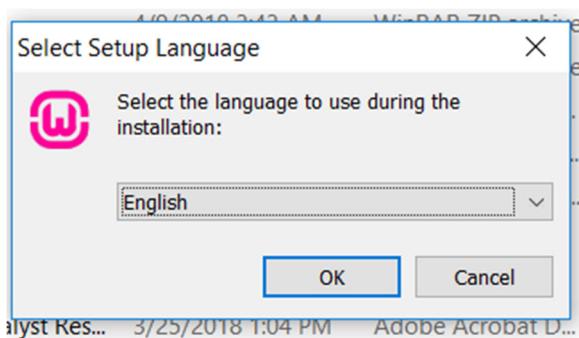
<http://eeecs.csuohio.edu/~sschung/cis611/InstallationGuideSQLServer2016.pdf>

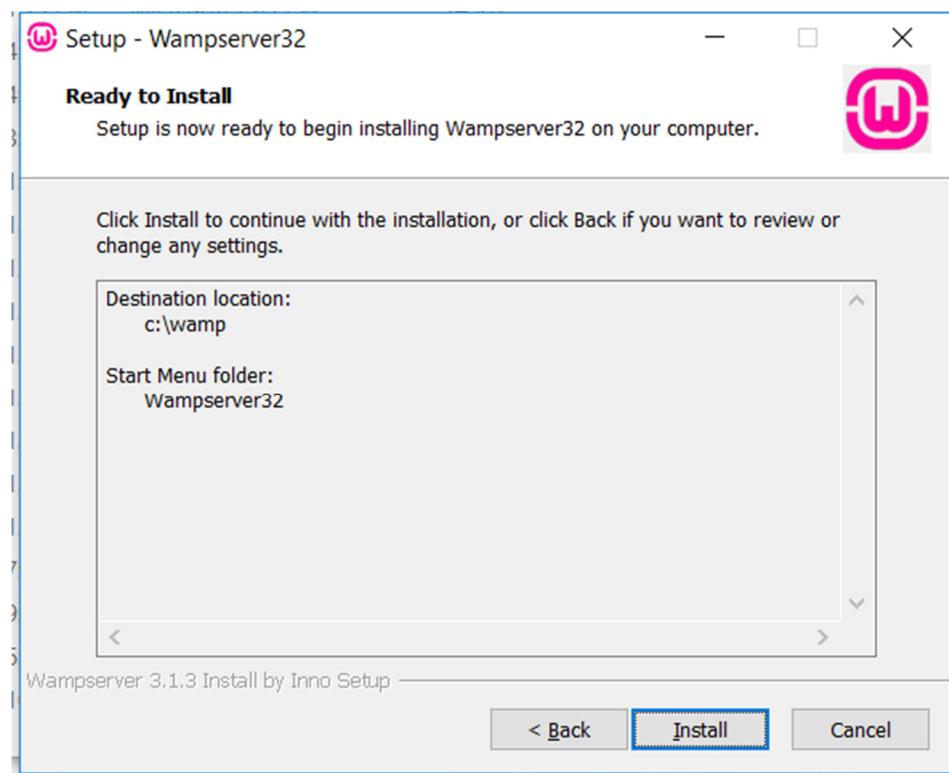
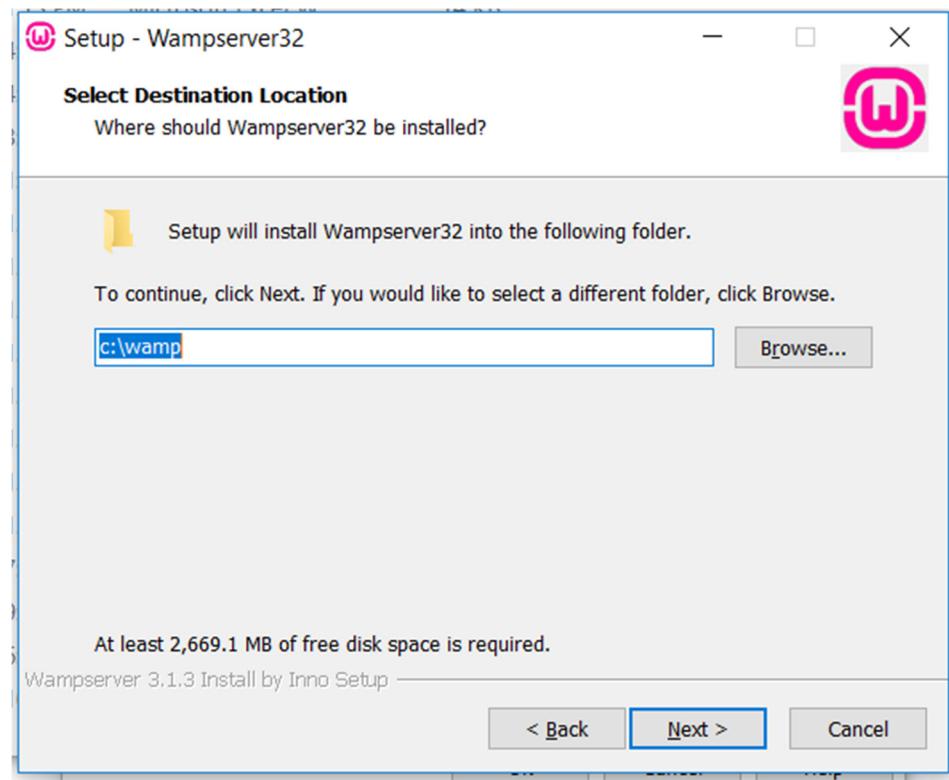
- Download WAMP Server V 3.0 or higher from:
<https://sourceforge.net/projects/wampserver/>

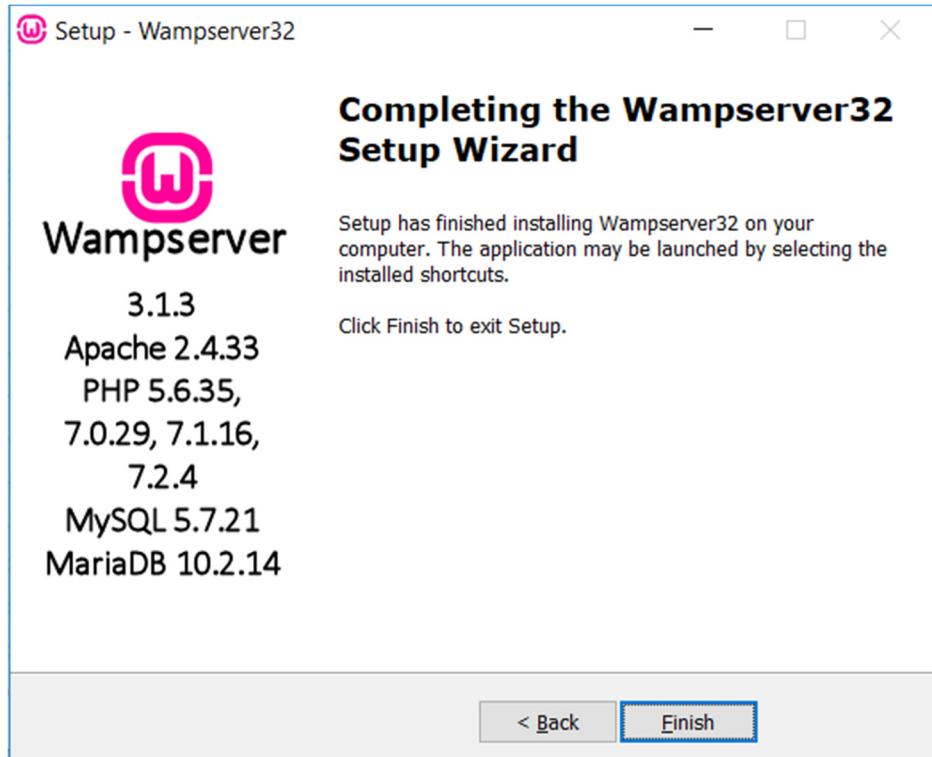
Download and Installation Instructions:

- After WAMP Server download start the installation:









- Then try to start the WAMP Server an icon will be seen in the icon notification bar. In the start the icon will be seen “red” in color i.e., all the services need to start.
- In general it runs 3 services Apache server, Phpmyadmin, MariaDB or DB Adminstration.

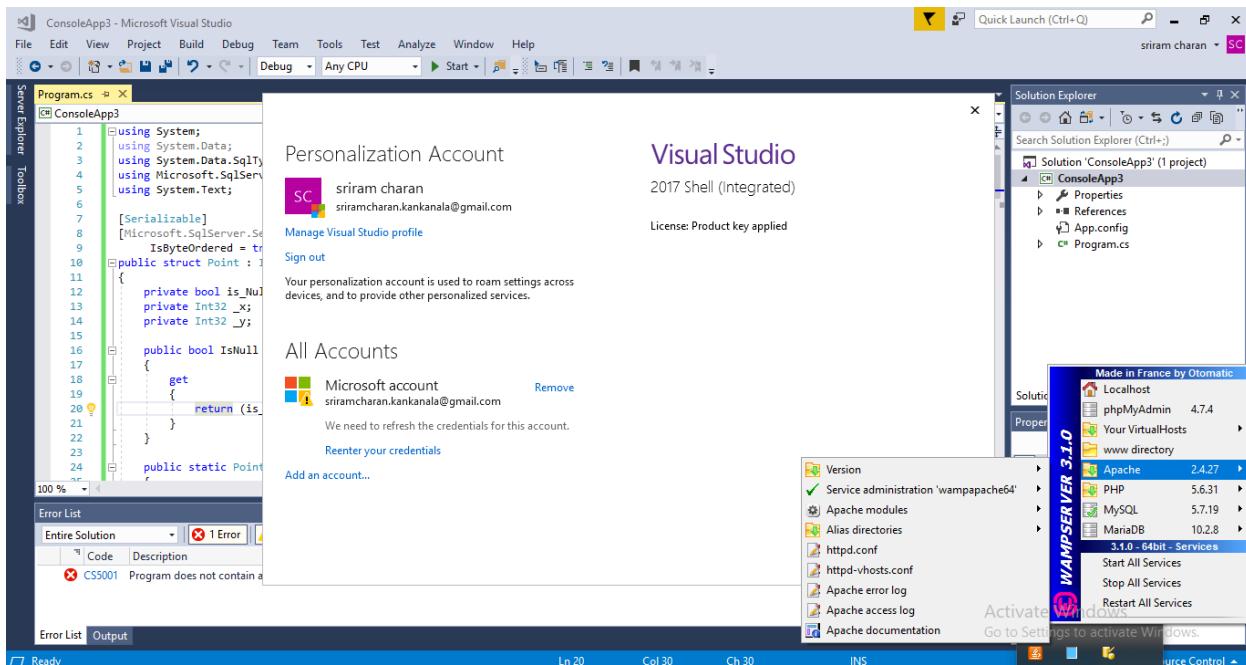


- Wait until all the services turn on and the icon turns to green. The major error/ issue while working on this is if some other application in the local system is using the same port then the WAMP Apache will not work on this so if Apache is not working try to change the port and check.
- Click on WAMP Icon-> Apache -> Service administration-> httpd.conf
- The primary local host id would be: 80, so wherever you see ‘80’ change it to 81, 82... or 8080/8081 etc. Don’t turn it to 3306 since it’s your system host id and click on save.

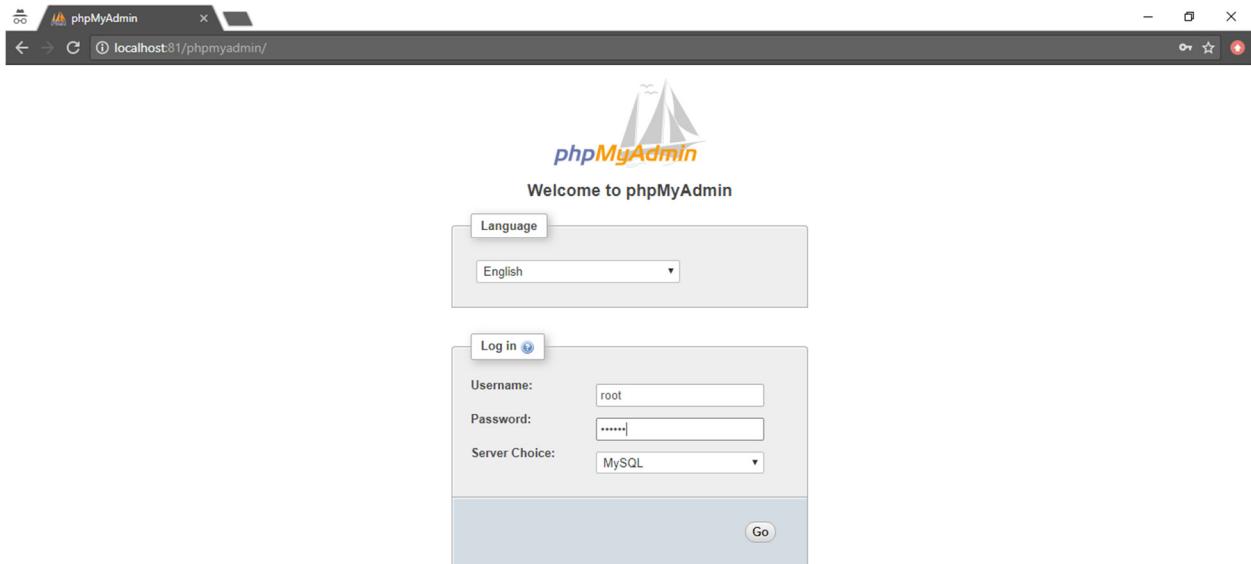
```

c:\wamp64\bin\apache\apache2.4.27\conf\httpd.conf - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
new 35 new 36 new 37 new 38 new 39 main_login.php XMLParse.py new 40.go prog7.go httpd.conf
# for individual mutexes, or change the global defaults
#
# Uncomment and change the directory if mutexes are file-based and the default
# mutex file directory is not on a local disk or is not appropriate for some
# other reason.
#
# Mutex default:logs
#
# Listen: Allows you to bind Apache to specific IP addresses and/or
# ports, instead of the default. See also the <VirtualHost>
# directive.
#
# Change this to Listen on specific IP addresses as shown below to
# prevent Apache from glomming onto all bound IP addresses.
#
#Listen 12.34.56.78:81
Listen 0.0.0.0:81
Listen [::]:81
#
# Dynamic Shared Object (DSO) Support
#
# To be able to use the functionality of a module which was built as a DSO
# have to place corresponding 'LoadModule' lines at this location so the
# directives contained in it are actually evaluated _before_ they are used
# Statically compiled modules (those listed by 'httpd -l') do not need
# to be loaded here.
#
# Example:
# LoadModule foo_module modules/mod_foo.so
#
# LoadModule access_compat_module modules/mod_access_compat.so
# LoadModule actions_module modules/mod_actions.so

```



➤ Then try to login to the phpmyadmin here the URL would be localhost followed by your host id that you have given. Username will be root and password will be empty at first. Login and create user and password followed by database.



Activate Windows
Go to Settings to activate Windows.

This screenshot shows the phpMyAdmin configuration page for MySQL 3306. The left sidebar lists databases: New, company, information_schema, mysql, performance_schema, and sys. The main area has sections for General settings (Change password, Server connection collation set to utf8mb4_unicode_ci), Appearance settings (Language set to English, Theme set to pmahomme, Font size set to 82%), and Database server (Server: MySQL (127.0.0.1 via TCP/IP), Server type: MySQL, Server version: 5.7.19 - MySQL Community Server (GPL)). It also includes sections for Web server (Apache/2.4.27 (Win64) PHP/5.6.31, PHP extension: mysqli, curl, mbstring) and phpMyAdmin (Version information: 4.7.4, Documentation, Official Homepage, Contribute, Get support, List of changes, License). A message at the bottom right says 'Activate Windows Go to Settings to activate Windows.'

localhost:81 / MySQL | phpMyAdmin

localhost:81/phpmyadmin/server_databases.php?db=

phpMyAdmin

Current server: MySQL

Databases

Create database ExampleDB Collation Create

Database	Collation	Action
company	latin1_swedish_ci	<input type="checkbox"/> Check privileges
information_schema	utf8_general_ci	<input type="checkbox"/> Check privileges
mysql	latin1_swedish_ci	<input type="checkbox"/> Check privileges
performance_schema	utf8_general_ci	<input type="checkbox"/> Check privileges
sys	utf8_general_ci	<input type="checkbox"/> Check privileges
Total: 5		

With selected: Drop

Note: Enabling the database statistics here might cause heavy traffic between the web server and the MySQL server.

- Enable statistics

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Console

Server: MySQL 3306 > Database: exampledb

Structure SQL Search Query Export Import Operations Privileges Routines Events More

Run SQL query/queries on database exampledb:

```
1 CREATE table employee(ID int, Name Varchar(30));
```

Clear Format Get auto-saved query

Bind parameters

localhost:81 / MySQL | phpMyAdmin

localhost:81/phpmyadmin/db_sql.php?db=exampledb

phpMyAdmin

Current server: MySQL

MySQL

Recent Favorites

There are no favorite tables.

New company exampledb New employee information_schema mysql performance_schema sys

Server: MySQL 3306 > Database: exampledb

Structure SQL Search Query Export Import Operations Privileges Routines Events More

Show query box

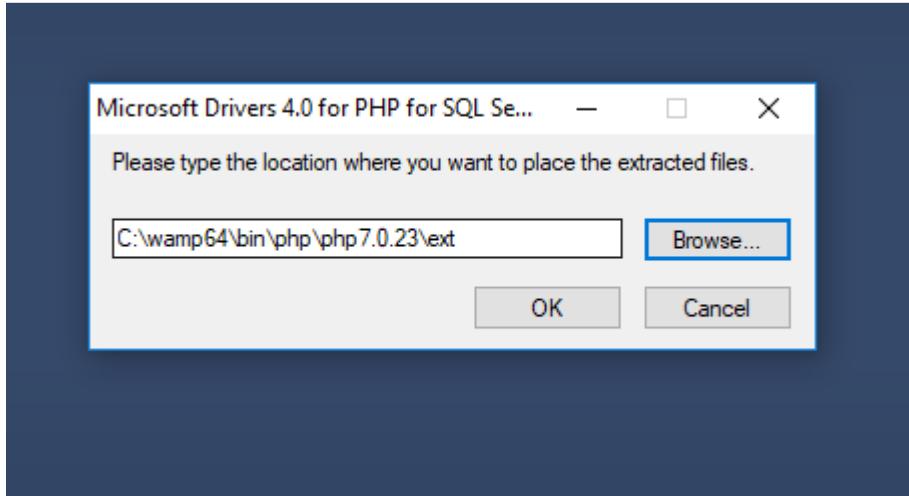
MySQL returned an empty result set (i.e. zero rows). (Query took 0.2028 seconds.)

```
CREATE table employee(ID int, Name varchar(30))
```

[Edit inline] [Edit] [Create PHP code]

Connecting MS SQL Server to PHP:

- **Download Microsoft Drivers for PHP to Sql server from:**
<https://www.microsoft.com/en-us/download/details.aspx?id=20098>
- **Extract the application and provide the path**
C:\wamp64\bin\php\php7.0.23\ext

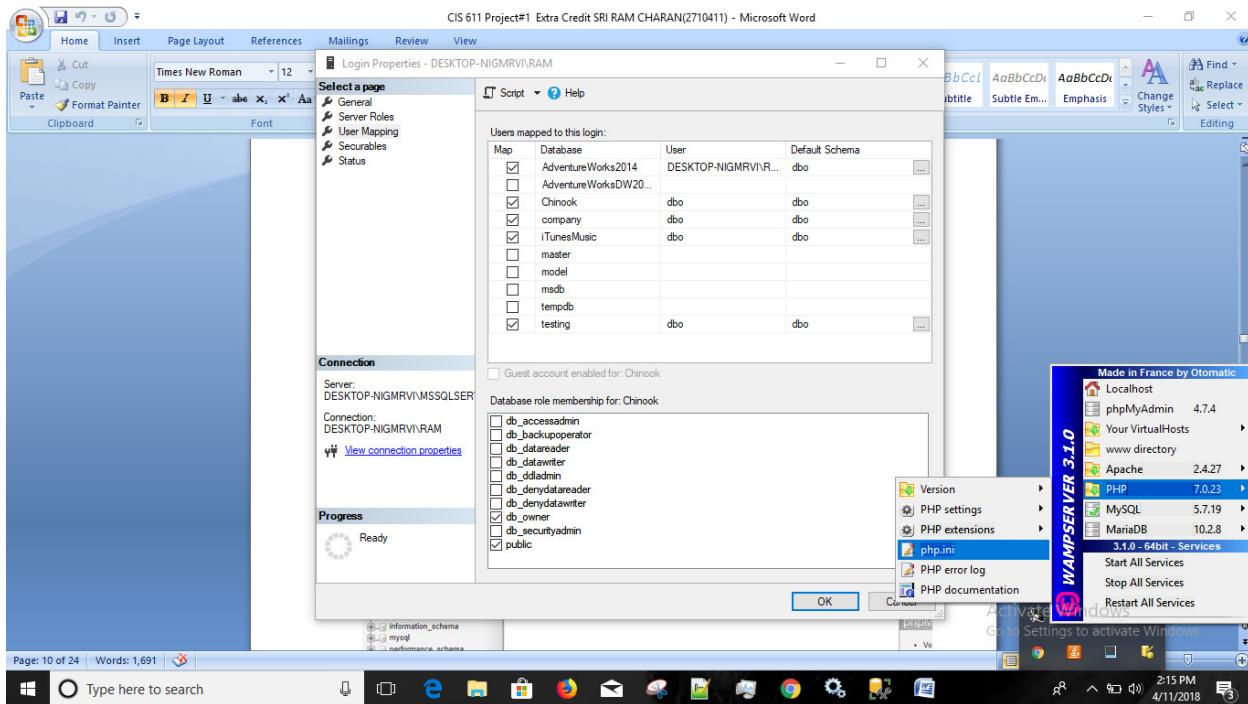


- **The extracted files will create a .dll files into the provided folder. Be careful with the versions, if the version changes then the .dll files will not work.**

php_pdo_firebird.dll	8/29/2017 7:02 AM	Application extens...	28 KB
php_pdo_mysql.dll	8/29/2017 7:02 AM	Application extens...	30 KB
php_pdo_oci.dll	8/29/2017 7:02 AM	Application extens...	32 KB
php_pdo_odbc.dll	8/29/2017 7:02 AM	Application extens...	27 KB
php_pdo_pgsql.dll	8/29/2017 7:02 AM	Application extens...	42 KB
php_pdo_sqlite.dll	8/29/2017 7:02 AM	Application extens...	1,029 KB
php_pdo_sqlsrv_7_nts_x64.dll	6/29/2016 7:21 PM	Application extens...	380 KB
php_pdo_sqlsrv_7_nts_x86.dll	6/29/2016 7:23 PM	Application extens...	313 KB
php_pdo_sqlsrv_7_ts_x64.dll	6/29/2016 7:23 PM	Application extens...	382 KB
php_pdo_sqlsrv_7_ts_x86.dll	6/29/2016 7:24 PM	Application extens...	315 KB
php_pgsql.dll	8/29/2017 7:02 AM	Application extens...	112 KB
php_phpdbs_webhelper.dll	8/29/2017 7:02 AM	Application extens...	17 KB
php_shmop.dll	8/29/2017 7:02 AM	Application extens...	16 KB
php_snmp.dll	8/29/2017 7:02 AM	Application extens...	408 KB
php_soap.dll	8/29/2017 7:02 AM	Application extens...	280 KB
php_sockets.dll	8/29/2017 7:02 AM	Application extens...	73 KB
php_sqlite3.dll	8/29/2017 7:02 AM	Application extens...	1,047 KB
php_sqlsrv_7_nts_x64.dll	6/29/2016 7:22 PM	Application extens...	397 KB
php_sqlsrv_7_nts_x86.dll	6/29/2016 7:24 PM	Application extens...	323 KB
php_sqlsrv_7_ts_x64.dll	6/29/2016 7:20 PM	Application extens...	401 KB
php_sqlsrv_7_ts_x86.dll	6/29/2016 7:24 PM	Application extens...	327 KB
php_sysvshm.dll	8/29/2017 7:02 AM	Application extens...	18 KB
php_tidy.dll	8/29/2017 7:02 AM	Application extens...	279 KB
php_xmlrpc.dll	8/29/2017 7:02 AM	Application extens...	84 KB
php_xsl.dll	8/29/2017 7:02 AM	Application extens...	283 KB
release	6/30/2016 10:39 AM	Text Document	3 KB
SQLSRV_Readme	6/28/2016 10:17 PM	HTM File	14 KB

Activate Windows
Go to Settings to activate Win

- **After the extraction click on WAMP icon-> php->php.ini and edit by adding the extensions with the .dll files added**



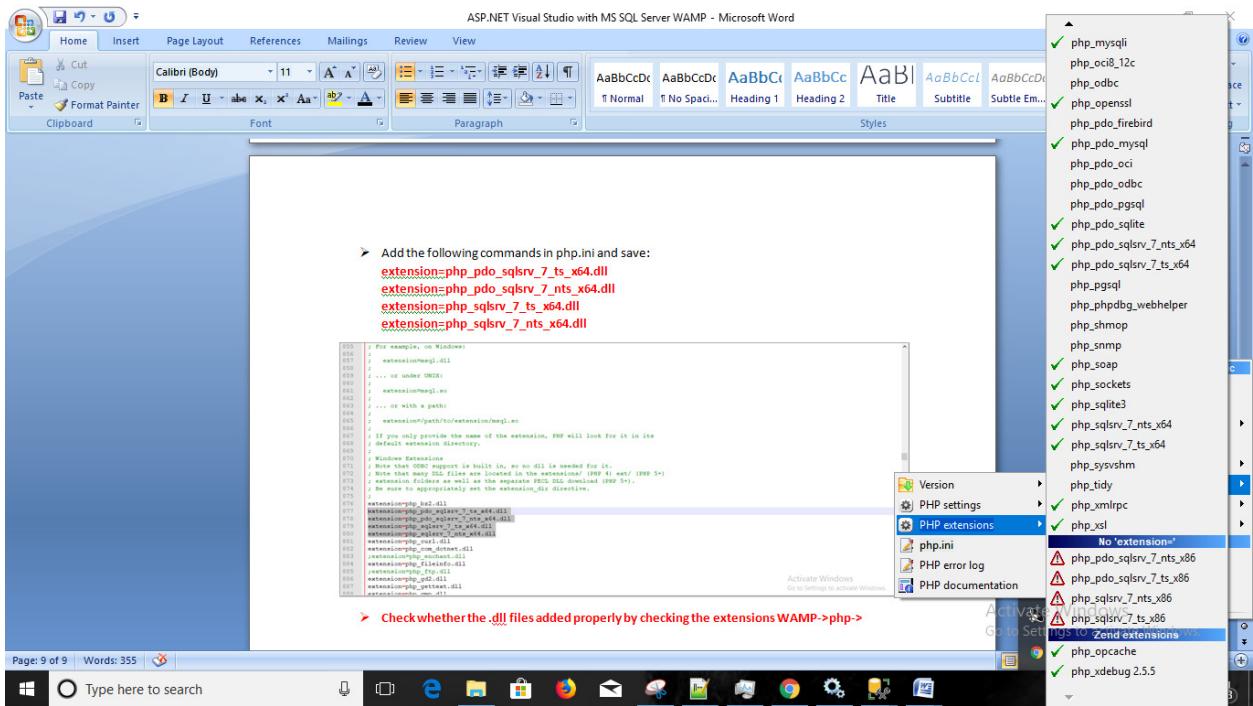
➤ Add the following commands in php.ini and save:

```
extension=php_pdo_sqlsrv_7_ts_x64.dll
extension=php_pdo_sqlsrv_7_nts_x64.dll
extension=php_sqlsrv_7_ts_x64.dll
extension=php_sqlsrv_7_nts_x64.dll
```

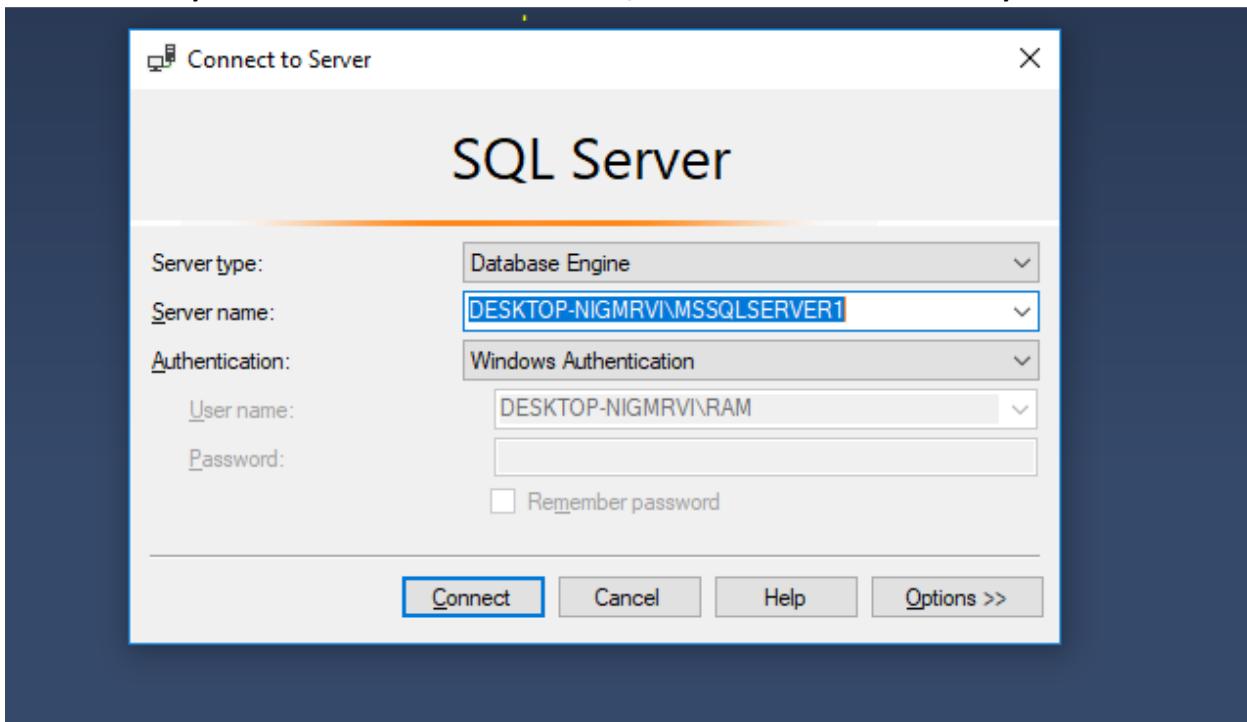
```
855 ; For example, on Windows:
856 ;
857 ; extension=msql.dll
858 ;
859 ; ... or under UNIX:
860 ;
861 ; extension=msql.so
862 ;
863 ; ... or with a path:
864 ;
865 ; extension=/path/to/extension/msql.so
866 ;
867 ; If you only provide the name of the extension, PHP will look for it in its
868 ; default extension directory.
869 ;
870 ; Windows Extensions
871 ; Note that ODBC support is built in, so no dll is needed for it.
872 ; Note that many DLL files are located in the extensions/ (PHP 4) ext/ (PHP 5+)
873 ; extension folders as well as the separate PECL DLL download (PHP 5+).
874 ; Be sure to appropriately set the extension_dir directive.
875 ;
876 extension=php_bz2.dll
877 extension=php_pdo_sqlsrv_7_ts_x64.dll
878 extension=php_pdo_sqlsrv_7_nts_x64.dll
879 extension=php_sqlsrv_7_ts_x64.dll
880 extension=php_sqlsrv_7_nts_x64.dll
881 extension=php_curl.dll
882 extension=php_com_dotnet.dll
883 ;extension=php_enchant.dll
884 extension=php_fileinfo.dll
885 ;extension=php_ftp.dll
886 extension=php_gd2.dll
887 extension=php_gettext.dll
888 extension=php_mmn.dll
```

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➤ Check whether the .dll files added properly by checking the extensions WAMP->php-> php extensions -> user added .dll's.



- Now check whether the MS SQL Server Management is open or running in the background.
- Here my sever name is DESKTOP-NIGMRVI\MSSQLSERVER1 it varies from yours.



Services (Local)	
SQL Server Analysis Services (MSSQLSERVER1)	Name
Stop the service	SQL Server (MSSQLSERVER)
Pause the service	SQL Server (MSSQLSERVER1)
Restart the service	SQL Server (MSSQLSERVER5)
Description:	Provides storage, processing and controlled access of data, and rapid transaction p
Supplies online analytical processing (OLAP) and data mining functionality for business intelligence applications.	SQL Server Agent (MSSQLSERVER)
	SQL Server Agent (MSSQLSERVER1)
	SQL Server Agent (MSSQLSERVER5)
	SQL Server Analysis Services (MSSQLSERVER)
	SQL Server Analysis Services (MSSQLSERVER1)
	SQL Server Analysis Services (MSSQLSERVER5)
	SQL Server Analysis Services CEIP (MSSQLSERVER)
	SQL Server Analysis Services CEIP (MSSQLSERVER1)
	SQL Server Analysis Services CEIP (MSSQLSERVER5)
	SQL Server Browser
	SQL Server CEIP service (MSSQLSERVER)
	SQL Server CEIP service (MSSQLSERVER5)
	SQL Server Distributed Replay Client
	SQL Server Distributed Replay Controller
	SQL Server Integration Services 13.0
	SQL Server Integration Services CEIP service 13.0
	SQL Server Launchpad (MSSQLSERVER)
	SQL Server Launchpad (MSSQLSERVER1)

➤ Now try to run a php test script and test the connection:

```

<?php
/* Specify the server and connection string attributes. */
$serverName = "DESKTOP-NIGMRV\MSQLSERVER1";
$connectionInfo = array( "Database"=>"company");

/* Connect using Windows Authentication. */
$conn = sqlsrv_connect( $serverName, $connectionInfo);
if( $conn === false )
{
    echo "Unable to connect.<br>";
    die( print_r( sqlsrv_errors(), true));
}

/* Query SQL Server for the login of the user accessing the
database. */
$stmt = sqlsrv_query( $conn, $sql);
if( $stmt === false )
{
    echo "Error in executing query.<br>";
    die( print_r( sqlsrv_errors(), true));
}

/* Retrieve and display the results of the query. */
$row = sqlsrv_fetch_array($stmt);
echo "User login: ".$row[0]."<br>";

/* Free statement and connection resources. */
sqlsrv_free_stmt( $stmt);
sqlsrv_close( $conn);
?>

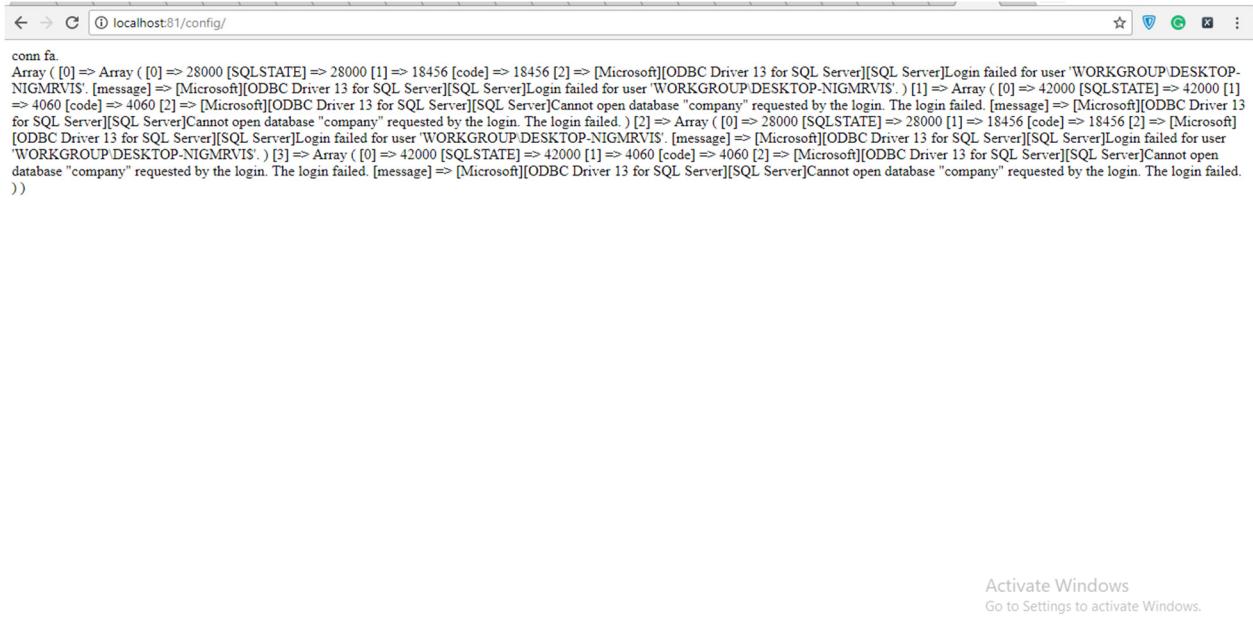
```

Activate Windows
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➤ Here check for the **serverName** in your MS SQL server management Studio and use it.
Followed by the database enter the database name that you would like to use for the project if you are using Windows authentication for logging into the server then you don't need to enter the Userid and password. If you are using different userid and password for each the database then mention in line-4 of the code as follows:

\$connectionInfo = array("Database"=>"company", "UID"=>"Your Userid", "PWD"=> "Password");

➤ Major error in connecting to the database here is, if you are using Windows Authentication and if the page shows error like the login for the username is failed like below,



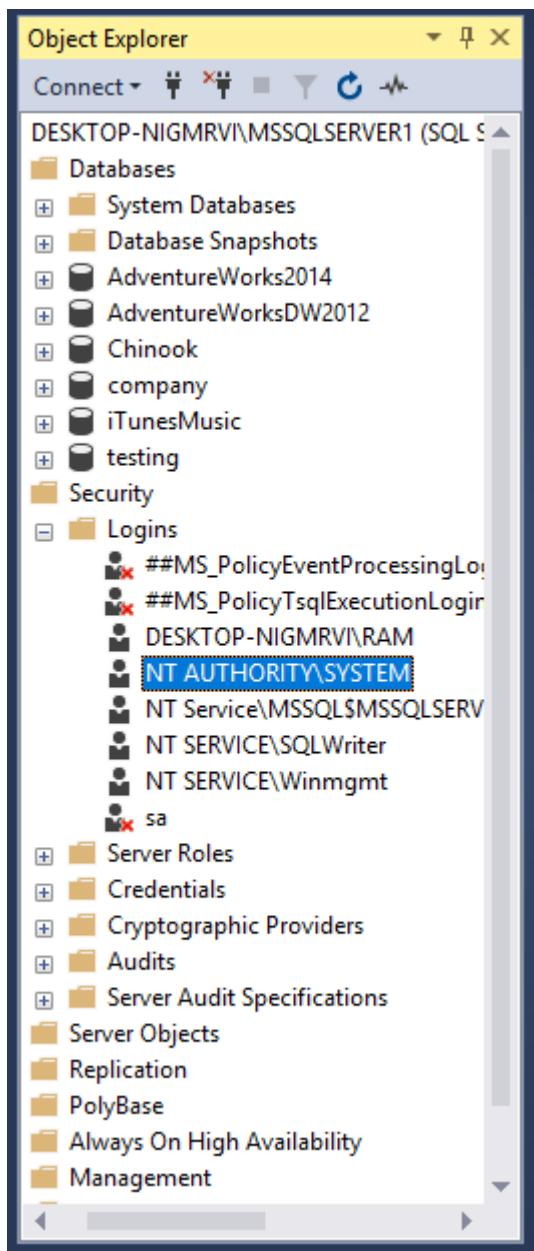
```
com fa.
Array ( [0] => Array ( [0] => 28000 [SQLSTATE] => 28000 [1] => 18456 [code] => 18456 [2] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Login failed for user 'WORKGROUP\DESKTOP-NIGMRVIS'. [message] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Login failed for user 'WORKGROUP\DESKTOP-NIGMRVIS'. ) [1] => Array ( [0] => 42000 [SQLSTATE] => 42000 [1] => 4060 [code] => 4060 [2] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Cannot open database "company" requested by the login. The login failed. [message] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Cannot open database "company" requested by the login. The login failed. ) [2] => Array ( [0] => 28000 [SQLSTATE] => 28000 [1] => 18456 [code] => 18456 [2] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Login failed for user 'WORKGROUP\DESKTOP-NIGMRVIS'. [message] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Login failed for user 'WORKGROUP\DESKTOP-NIGMRVIS'. ) [3] => Array ( [0] => 42000 [SQLSTATE] => 42000 [1] => 4060 [code] => 4060 [2] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Cannot open database "company" requested by the login. The login failed. [message] => [Microsoft][ODBC Driver 13 for SQL Server][SQL Server]Cannot open database "company" requested by the login. The login failed. )
)

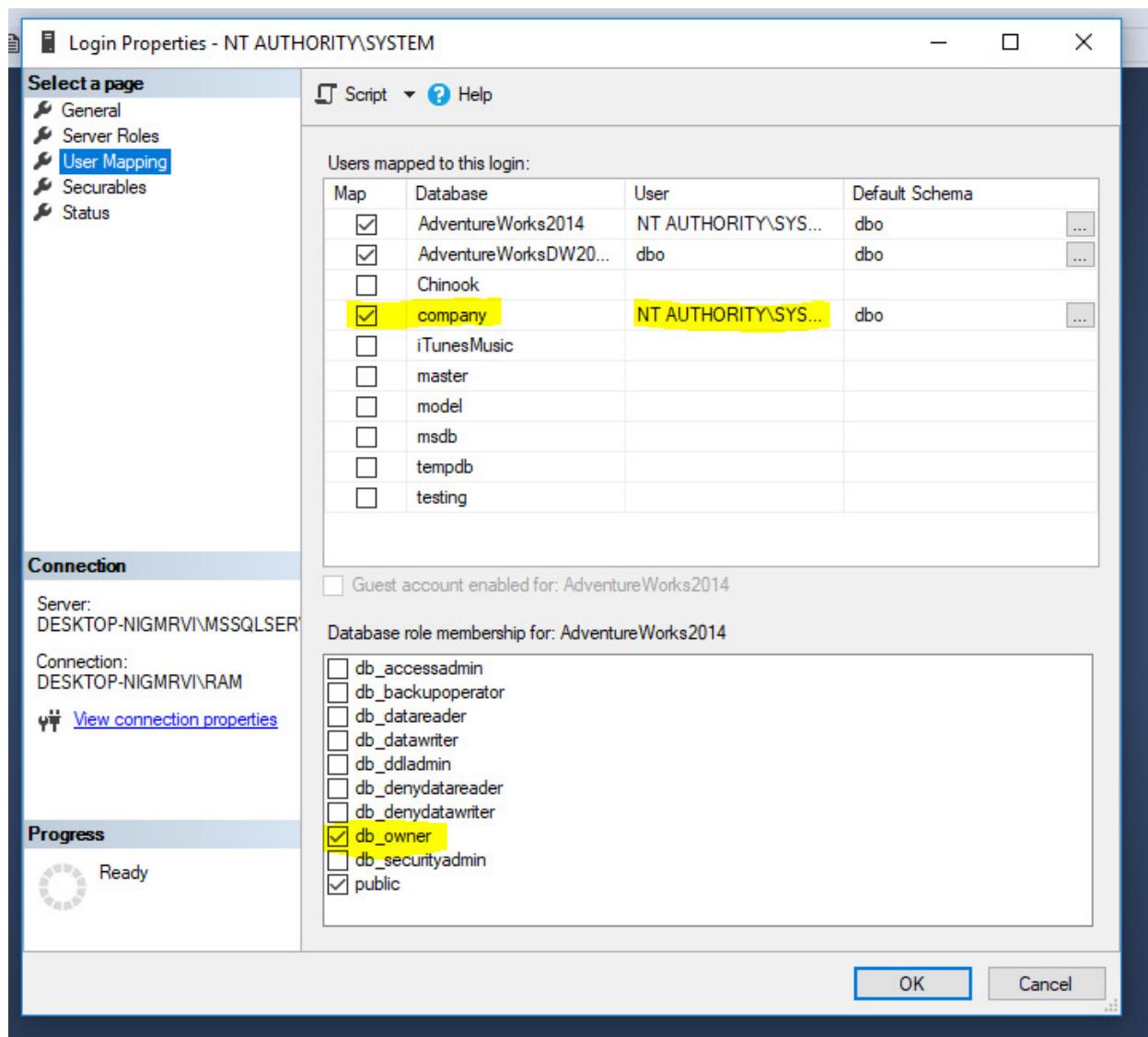
```

Activate Windows
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Then go to the MS SQL Server Studio and check for the user mapping. Follow the path:

Server Login-> Security-> Logins- > NT AUTHORITY\SYSTEM-> properties -> User Mapping-> check box the database that you would like to use and you will find some options below check box db_owner then you will be all set.





- Now place the php test script in the following path of WAMP:
C:\wamp64\www\YourFileName.php



- If it is connected then it shows the user logged-in as per my code.