

**TugasMinggu01-Instalasi Web Server, PHP dan MariaDB/MySQL**

**HOW TO INSTALL WEB SERVER ON WINDOWS 10  
(APACHE 2.4, PHP 7, MYSQL 8.0 AND PHPMYADMIN)**

***1. Downloading Apache, PHP, MySQL, phpMyAdmin***

\* Download Apache for Windows: <https://www.apachelounge.com/download/>

<<https://www.apachelounge.com/download/>>

\* Download PHP 7 for Windows (select 'Thread Safe'):

<http://windows.php.net/qa/> <<https://miloserdov.org/?goto=425>>

\* Download MySQL for Windows (select ZIP Archive):

<http://dev.mysql.com/downloads/mysql/>

<<https://miloserdov.org/?goto=426>>

\* Download phpMyAdmin: <https://www.phpmyadmin.net/>

<<https://www.phpmyadmin.net/>>

\* Download the latest Visual C++ Redistributable for Visual Studio

2015-2019: (direct link to download the 64-bit

<[https://aka.ms/vs/16/release/VC\\_redist.x64.exe](https://aka.ms/vs/16/release/VC_redist.x64.exe)> version, a direct

link to the download of the 32-bit

<[https://aka.ms/vs/16/release/VC\\_redist.x86.exe](https://aka.ms/vs/16/release/VC_redist.x86.exe)> version).

Now we have files:

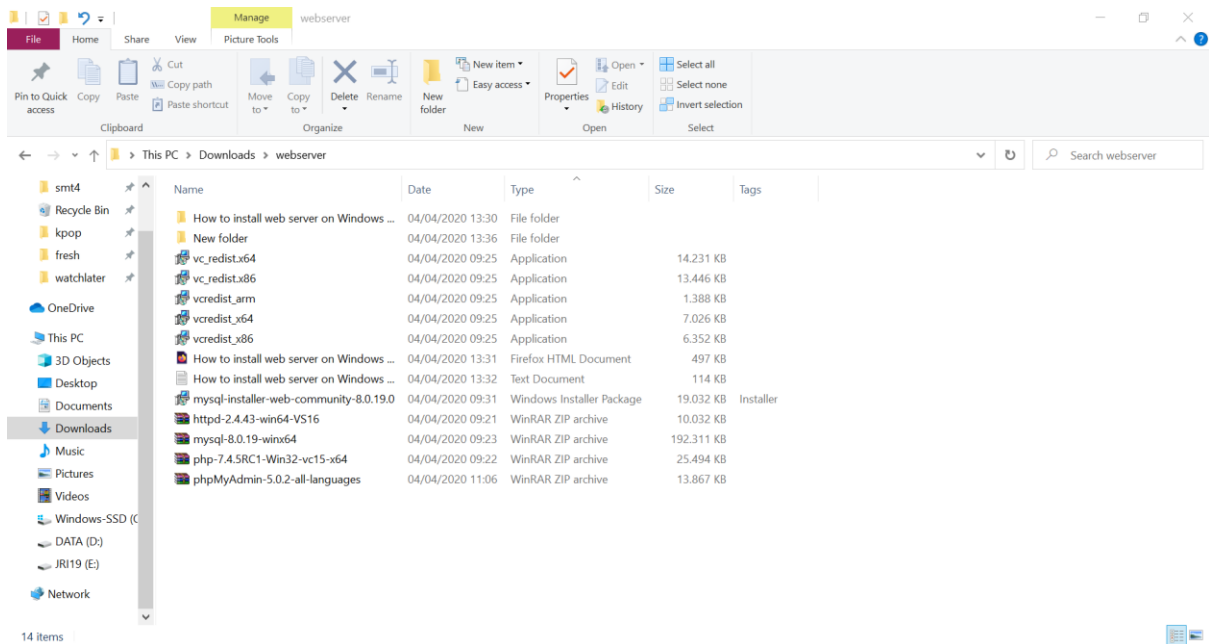
\* [httpd-2.4.29-Win64-VC15.zip](#)

\* [php-7.2.0-Win32-VC15-x64.zip](#)

\* [mysql-8.0.11-winx64.zip](#)

\* [phpMyAdmin-4.7.7-all-languages.zip](#)

\* [vc\\_redist.x64.exe](#)



Run and install the `*vc_redist.x64.exe*` file, we will not return to it.

## 2. Create necessary folders

On the drive `*C*` create a directory `*Server*`; inside it create the `*bin*` directory (we will install Apache, PHP, and MySQL there) and `*data*` directory (our websites and databases will be located there).

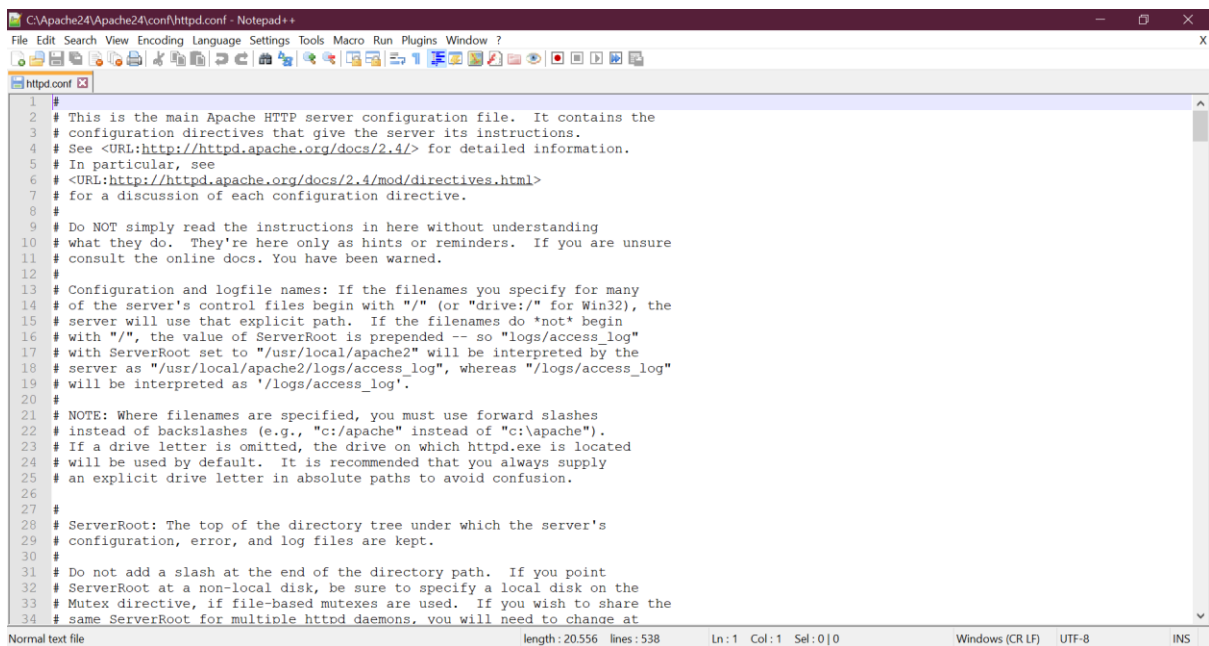
We continue our preparations. In the `*data*` directory create two folders:

- `* *DB *` (database will be stored here)
- `* *htdocs *` (websites will be stored here)

## 3. Installation and configuration Apache 2.4 on Windows

Unpack the Apache files (archive `httpd-2.4.25-win64-VC14.zip`) to the `*C:\Server\bin\*` directory (we are interested only in the `*Apache24*` folder):

After unpacking, go to the `*c:\Server\bin\Apache24\conf\*` folder and open the `*httpd.conf*` file with any text editor.



```
1 #
2 # This is the main Apache HTTP server configuration file. It contains the
3 # configuration directives that give the server its instructions.
4 # See <URL:http://httpd.apache.org/docs/2.4/> for detailed information.
5 # In particular, see
6 # <URL:http://httpd.apache.org/docs/2.4/mod/directives.html>
7 # for a discussion of each configuration directive.
8 #
9 # Do NOT simply read the instructions in here without understanding
10 # what they do. They're here only as hints or reminders. If you are unsure
11 # consult the online docs. You have been warned.
12 #
13 # Configuration and logfile names: If the filenames you specify for many
14 # of the server's control files begin with "/" (or "drive:/" for Win32), the
15 # server will use that explicit path. If the filenames do *not* begin
16 # with "/", the value of ServerRoot is prepended -- so "logs/access_log"
17 # with ServerRoot set to "/usr/local/apache2" will be interpreted by the
18 # server as "/usr/local/apache2/logs/access_log", whereas "/logs/access_log"
19 # will be interpreted as '/logs/access_log'.
20 #
21 # NOTE: Where filenames are specified, you must use forward slashes
22 # instead of backslashes (e.g., "c:/apache" instead of "c:\apache").
23 # If a drive letter is omitted, the drive on which httpd.exe is located
24 # will be used by default. It is recommended that you always supply
25 # an explicit drive letter in absolute paths to avoid confusion.
26 #
27 #
28 # ServerRoot: The top of the directory tree under which the server's
29 # configuration, error, and log files are kept.
30 #
31 # Do not add a slash at the end of the directory path. If you point
32 # ServerRoot at a non-local disk, be sure to specify a local disk on the
33 # mutex directive, if file-based mutexes are used. If you wish to share the
34 # same ServerRoot for multiple httpd daemons, you will need to change at
```

Replace | Define SRVROOT "c:/Apache24" | with | Define SRVROOT "c:/Server/bin/Apache24" |

replace | #ServerName www.example.com:80 | with | ServerName localhost |

replace | DocumentRoot "\${SRVROOT}/htdocs" | with | DocumentRoot "c:/Server/data/htdocs/" |

replace | <Directory "\${SRVROOT}/htdocs"> | with | <Directory "c:/Server/data/htdocs/"> |

replace | DirectoryIndex index.html | with | DirectoryIndex index.php index.html index.htm |

replace

| # AllowOverride controls what directives may be placed in .htaccess files. |

| # It can be "All", "None", or any combination of the keywords: |

| # AllowOverride FileInfo AuthConfig Limit |

| # |

| AllowOverride None |

with

| # AllowOverride controls what directives may be placed in .htaccess files. |

| # It can be "All", "None", or any combination of the keywords: |

| # AllowOverride FileInfo AuthConfig Limit |

| # |

| AllowOverride All |

and replace | #LoadModule rewrite\_module modules/mod\_rewrite.so |

with

|LoadModule rewrite\_module modules/mod\_rewrite.so|

Save and close the file. Apache configuration is complete!

Open a command prompt (it can be done by simultaneously pressing \*Win +X\*). Select '\*Windows PowerShell (admin)\*':

Copy-paste:

|c:\Server\bin\Apache24\bin\httpd.exe -k |install|and press Enter.

If you see Firewall prompt, select '\*Allow access\*'.  
Also copy-paste and run: |c:\Server\bin\Apache24\bin\httpd.exe -k start|

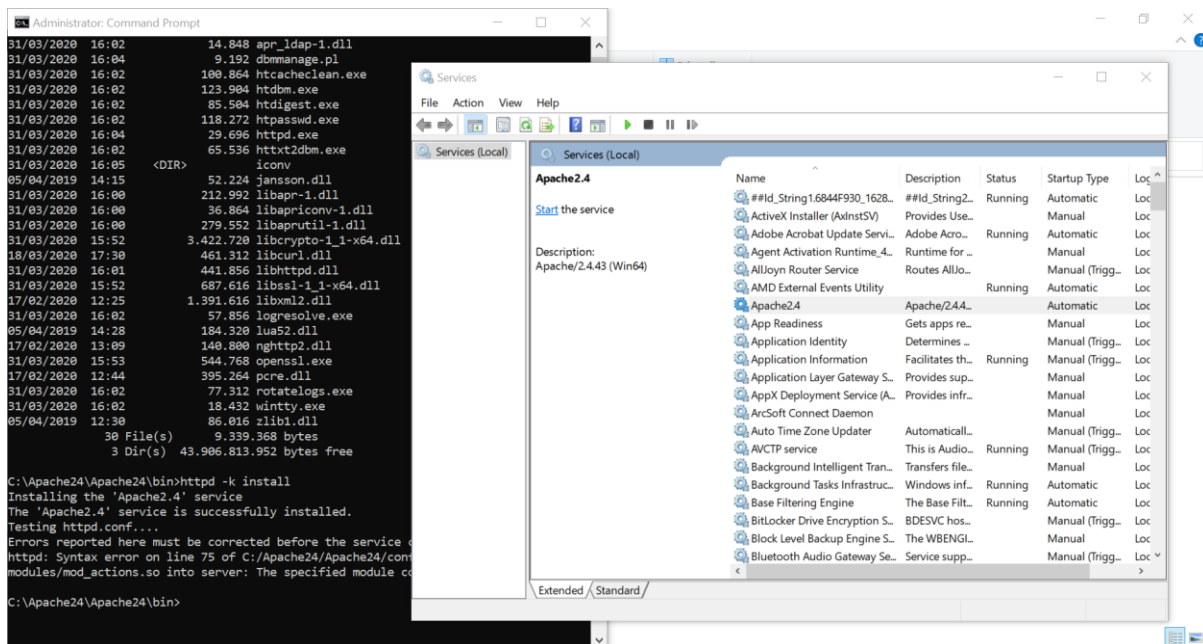
Afterwards in your browser follow the link http://localhost/

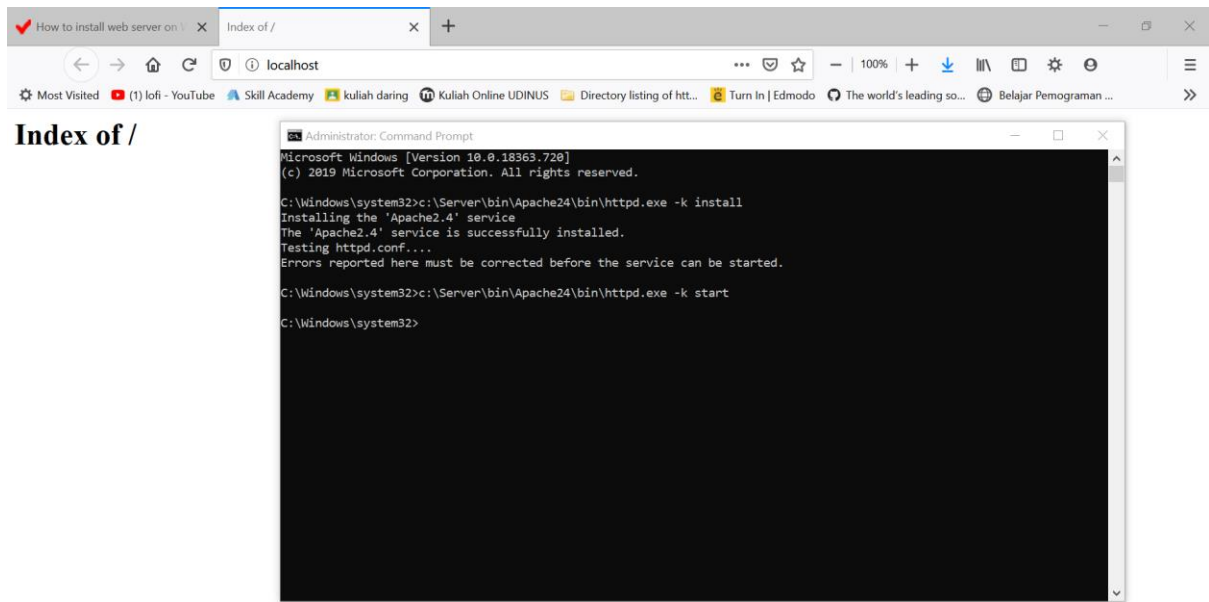
<http://localhost/> you'll see something like that

It means:

\* Apache works

\* directory \*c:\Server\data\htdocs\\* is empty





You can play with your new shiny web-server: add html-files to the folder, your server is running.

#### ***4. Installation and configuration MySQL 8.0 on Windows***

In the \*c:\Server\bin\\* folder unpack MySQL archive (the mysql-8.0.11-winx64.zip file). Rename it to \*mysql-8.0\* (just for short).

Go inside the \*mysql-8.0\* folder and create \*my.ini\* file. Open this file with any text editor. Copy-paste the following lines:

```
[[mysql]]  
| |  
|sql_mode=NO_ENGINE_SUBSTITUTION,STRICT_TRANS_TABLES |  
|datadir=| |"c:/Server/data/DB/data/"|  
|default_authentication_plugin=mysql_native_password|
```

Save and close it.

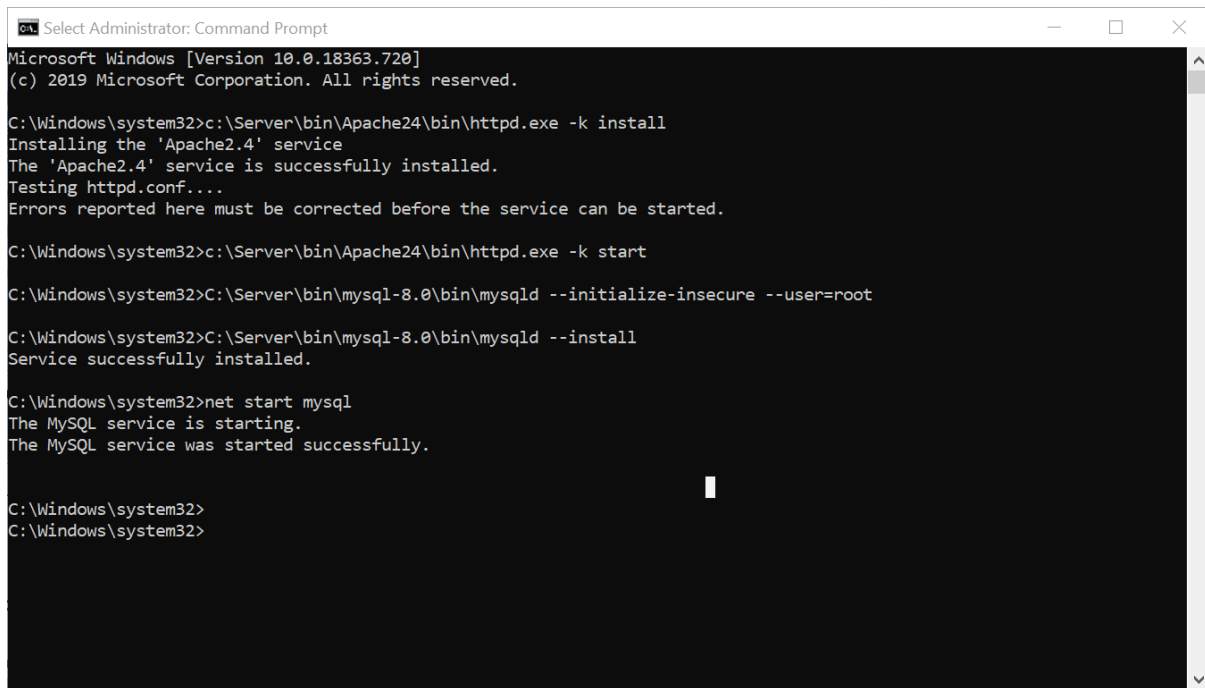
Configuration is completed! But we have to initialize and install MySQL 8.0 on Windows. Open Command Prompt (as Admin) and run:

```
|C:\Server\bin\mysql-8.0\bin\mysqld --initialize-insecure --user=root|
```

```
|C:\Server\bin\mysql-8.0\bin\mysqld --| |install|
```

```
|net start mysql|
```

Once the process completed, inside the \*C:\Server\data\DB\data\\* folder automatically generated files should appear:



```
Select Administrator: Command Prompt
Microsoft Windows [Version 10.0.18363.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Windows\system32>c:\Server\bin\Apache24\bin\httpd.exe -k install
Installing the 'Apache2.4' service
The 'Apache2.4' service is successfully installed.
Testing httpd.conf...
Errors reported here must be corrected before the service can be started.

C:\Windows\system32>c:\Server\bin\Apache24\bin\httpd.exe -k start

C:\Windows\system32>C:\Server\bin\mysql-8.0\bin\mysqld --initialize-insecure --user=root

C:\Windows\system32>C:\Server\bin\mysql-8.0\bin\mysqld --install
Service successfully installed.

C:\Windows\system32>net start mysql
The MySQL service is starting.
The MySQL service was started successfully.

C:\Windows\system32>
C:\Windows\system32>
```

From now MySQL service will start automatically with every Windows boot.

If initialization failed and there is lack of files in the

\*C:\Server\data\DB\data\\* folder and MySQL service failed to start, or

in the \*C:\Server\data\DB\data\\*.err\* file you got errors like that:

```
|[ERROR] InnoDB: Operating system error number 87 in a file operation|
```

```
|[ERROR] InnoDB: File .\ib_logfile101: 'aio write' return OS error 187.|
```

```
|[ERROR] InnoDB: Cannot continue operation|
```

To cope the issue, remove all files from \*C:\Server\data\DB\data\\*

folder, and to the my.\*ini file\* add the line:

```
|innodb_flush_method=normal|
```

After that initialize MySQL again:

```
| C:\Server\bin\mysql-8.0\bin\mysqld --initialize-insecure --user=root |
```

```
| C:\Server\bin\mysql-8.0\bin\mysqld -- | | install |
```

```
| net start mysql |
```

Everyone who has issues with MySQL service, to fix it try to reset MySQL

installatoin and install in from scratch:

1. Remove the service:

```
| net stop mysql |
```

```
| c:\Server\bin\mysql-8.0\bin\mysqld --remove |
```

2. In the \*c:/Server/data/DB/data/\* folder remove all files

3. Initialize and install the service:

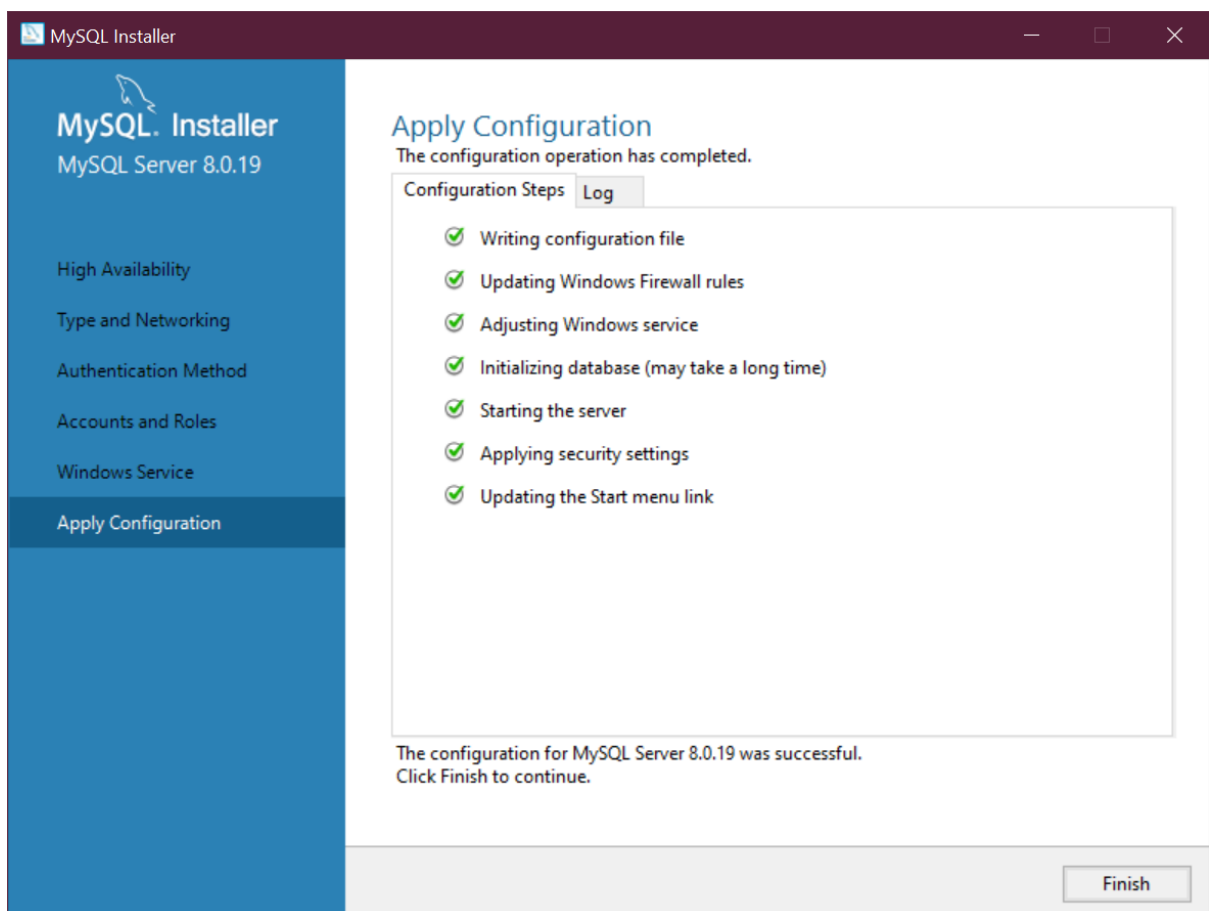
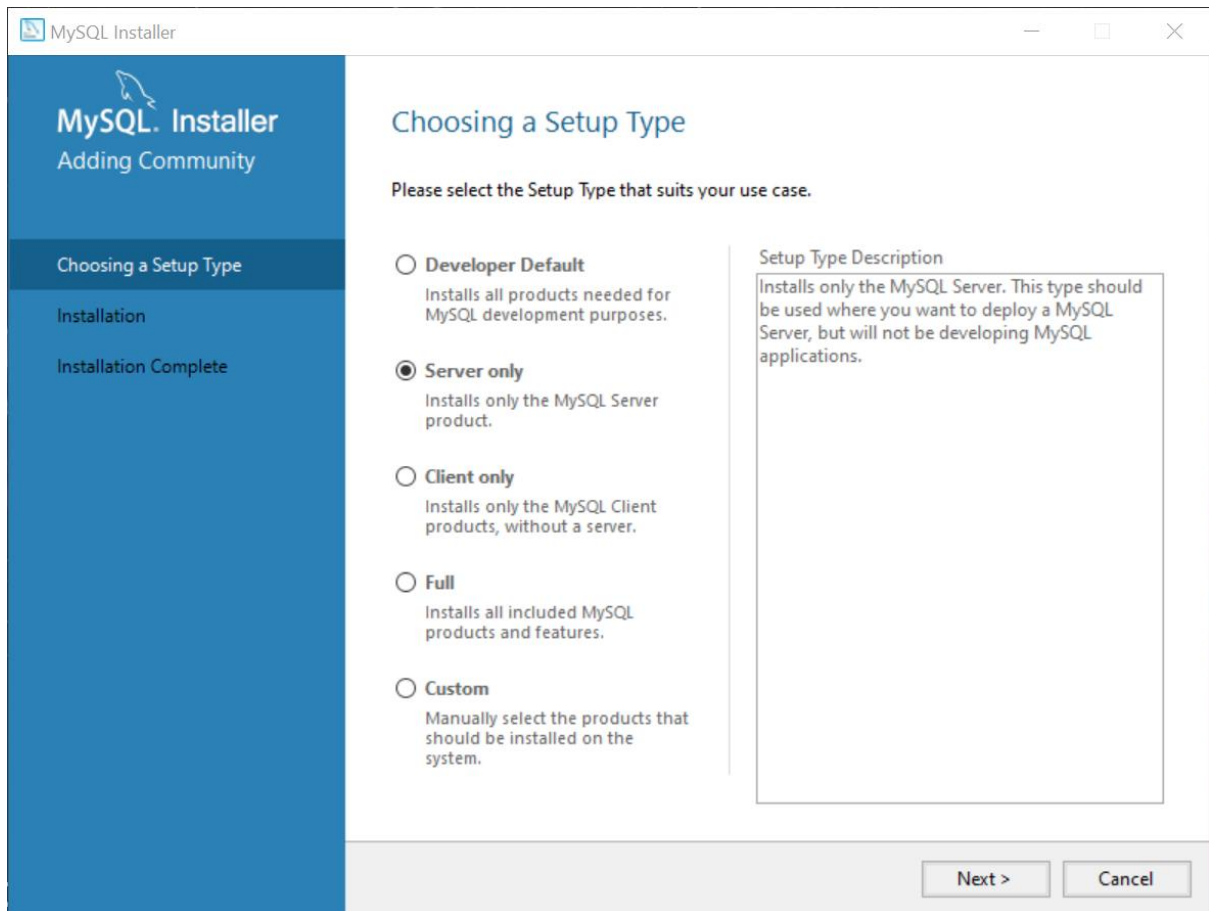
```
| C:\Server\bin\mysql-8.0\bin\mysqld --initialize-insecure --user=root |
```

```
| C:\Server\bin\mysql-8.0\bin\mysqld -- | | install |
```

```
| net start mysql |
```

If the problem persists please provide the content of the

\*C:\Server\data\DB\data\\*.err\* file.





## 5. Installation PHP 7 on Windows

In the \*c:\Server\bin\\* create new \*PHP\* folder and copy there the contents of php-7.1.1RC1-Win32-VC14-x64.zip.

Again open the \*c:\Server\bin\Apache24\conf\httpd.conf\* file and append it with lines:

```
|PHPIniDir "C:/Server/bin/PHP"|
```

```
|AddHandler application/x-httpd-php .php|
```

```
|LoadModule php7_module "C:/Server/bin/PHP/php7apache2_4.dll"|
```

And restart Apache:

```
|c:\Server\bin\Apache24\bin\httpd.exe -k restart|
```

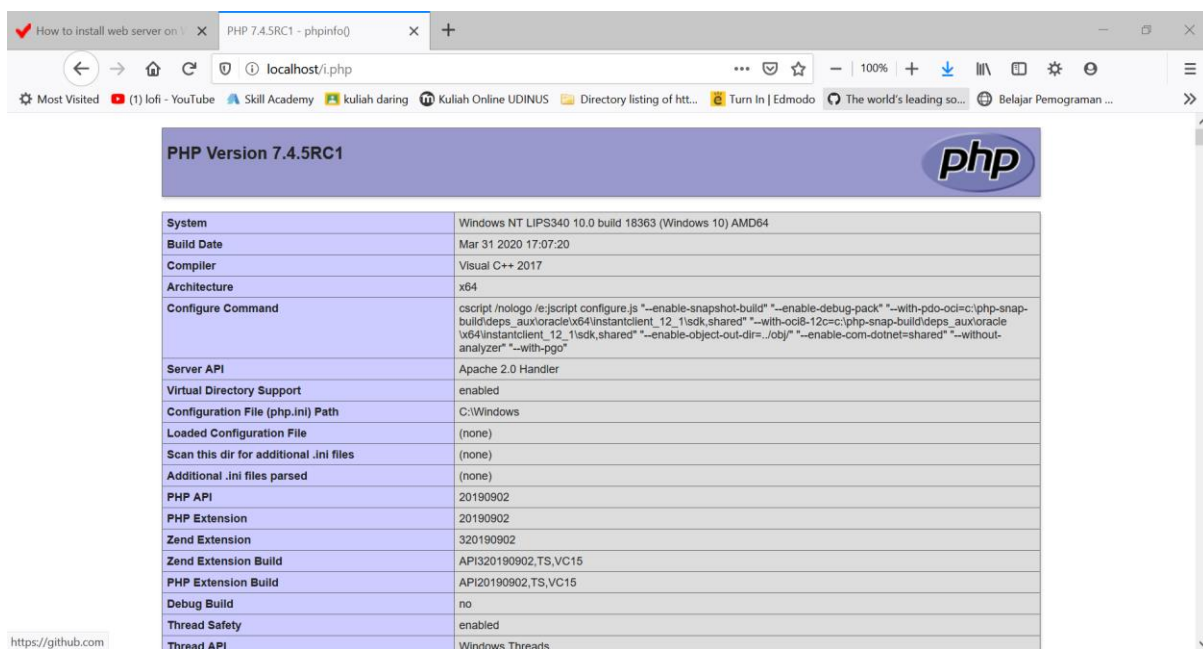
In the \*c:\Server\data\htdocs\\* folder create \*i.php\* file and copy to there:

```
|<?php|
```

```
|phpinfo ();|
```

In a browser open the <http://localhost/i.php>

<<http://localhost/i.php>> address. If you see something like this, it means PHP works:



The screenshot shows a web browser window with the address bar displaying [localhost/i.php](http://localhost/i.php). The page content is the PHP 7.4.5RC1 phpinfo() output, which includes the PHP logo and a table of system and configuration details.

PHP Version 7.4.5RC1	
System	Windows NT LIPS340 10.0 build 18363 (Windows 10) AMD64
Build Date	Mar 31 2020 17:07:20
Compiler	Visual C++ 2017
Architecture	x64
Configure Command	cscrip /nologo /e:jscrip configure.js "--enable-snapshot-build" "--enable-debug-pack" "--with-pdo-oci=c:/php-snap-build/deps_aux/oracle/v64/instantclient_12_1/sdk,shared" "--with-oci8-12c=c:/php-snap-build/deps_aux/oracle/v64/instantclient_12_1/sdk,shared" "--enable-object-out-dir=../obj/" "--enable-com-dotnet=shared" "--without-analyzer" "--with-pgo"
Server API	Apache 2.0 Handler
Virtual Directory Support	enabled
Configuration File (php.ini) Path	C:\Windows
Loaded Configuration File	(none)
Scan this dir for additional .ini files	(none)
Additional .ini files parsed	(none)
PHP API	20190902
PHP Extension	20190902
Zend Extension	320190902
Zend Extension Build	API320190902,TS,VC15
PHP Extension Build	API20190902,TS,VC15
Debug Build	no
Thread Safety	enabled
Thread API	Windows Threads

## 6. Installation and configuration phpMyAdmin on Windows

To the \*c:\Server\data\htdocs\\* folder copy the content of

phpMyAdmin-4.6.5.2-all-languages.zip. Rename

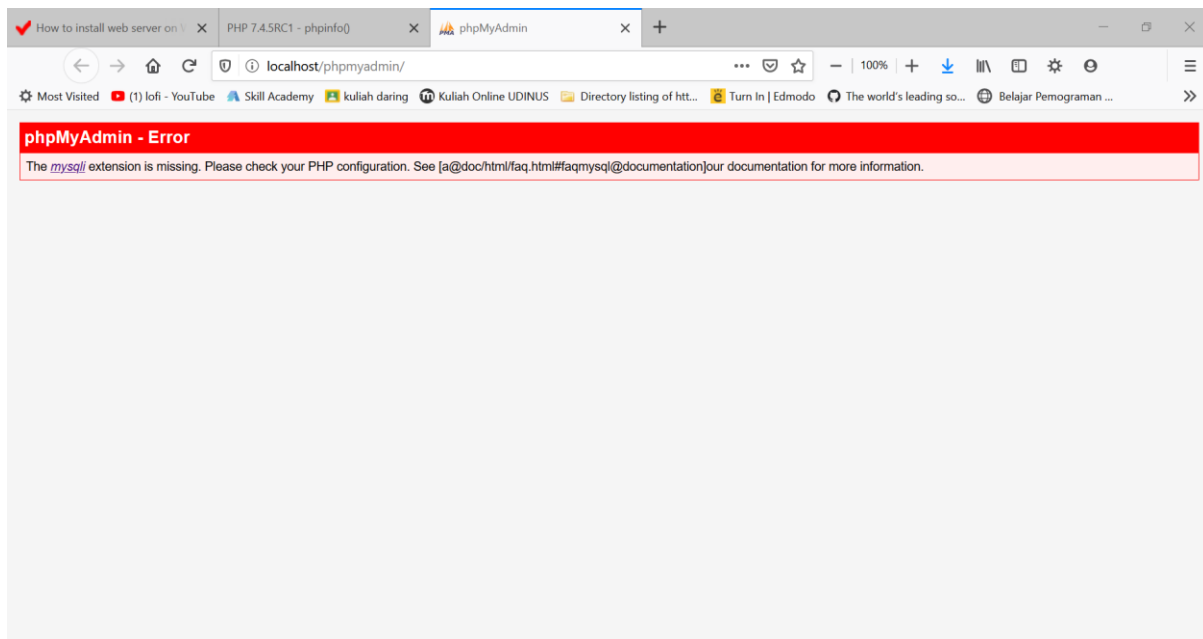
phpMyAdmin-4.6.5.2-all-languages to \*phpmyadmin \*(for brevity).

In the \*c:\Server\data\htdocs\phpmyadmin\ \*folder create

\*config.inc.php\* file and copy there:

```
1  <?php
2
3  /* Servers configuration */
4  $i = 0;
5
6  /* Server: localhost [1] */
7  $i++;
8  $cfg['Servers'][$i]['verbose'] = '';
9  $cfg['Servers'][$i]['host'] = 'localhost';
10 $cfg['Servers'][$i]['port'] = '';
11 $cfg['Servers'][$i]['socket'] = '';
12 $cfg['Servers'][$i]['connect_type'] = 'tcp';
13 $cfg['Servers'][$i]['extension'] = 'mysqli';
14 $cfg['Servers'][$i]['auth_type'] = 'cookie';
15 $cfg['Servers'][$i]['user'] = 'root';
16 $cfg['Servers'][$i]['password'] = '';
17 $cfg['Servers'][$i]['nopassword'] = true;
18 $cfg['Servers'][$i]['AllowNoPassword'] = true;
19
20 /* End of servers configuration */
21
22 $cfg['blowfish_secret'] = 'kjLGJ8g;Hj3mlHy+Gd~FE3mN{gIATs^1lX+T=KVYv{ubK*U0V';
23 $cfg['DefaultLang'] = 'ru';
24 $cfg['ServerDefault'] = 1;
25 $cfg['UploadDir'] = '';
26 $cfg['SaveDir'] = '';
27
28 ?>
```

Open in your browser <http://localhost/phpmyadmin/>



Enter \*root \*as name, do not fill password. If everything is fine it should not look like that