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

Web Server:

1. A server commonly refers to a computer program that receives and responds to requests made over a network.

2.A web server is used for storing and transferring a website's content. A web server sends all the text, video, application data, graphics, and other content that users may require. The web server requests the website's data each time a user clicks a link or begins a download.

Database Server:

Database servers are used to store and manage databases that are stored on the server and to provide data access for authorized users.

Private IP Address:

1.An IP address is the identifier that enables your device to send or receive data packets across the internet.

2.It holds information related to your location and therefore making devices available for two-way communication.

3.Private IP address of a system is the IP address that is used to communicate within the same network. Using private IP data or information can be sent or received within the same network.

Port Address:

1.A port number is a way to identify a specific process to which an internet or other network message is to be forwarded when it arrives at a server.
2.Port is an address of a 16-bit unsigned integer number which ranges from 0 to 65535

Server-side Programming:

1.Server-side programming refers to the process of writing and executing code on the server side of a client-server architecture.

2. Users don't see this development because it happens on servers.

3. Server side uses coding languages like: Python, PHP, Java, C#

Common server-side tasks include:

- Coding dynamic websites
- Developing web applications
- Connecting websites to databases
- Implementing content management systems
- Making sure programs retrieve information properly
- Ensuring systems are safe from hackers
- Restoring and backing up files

Web Server solution stack:

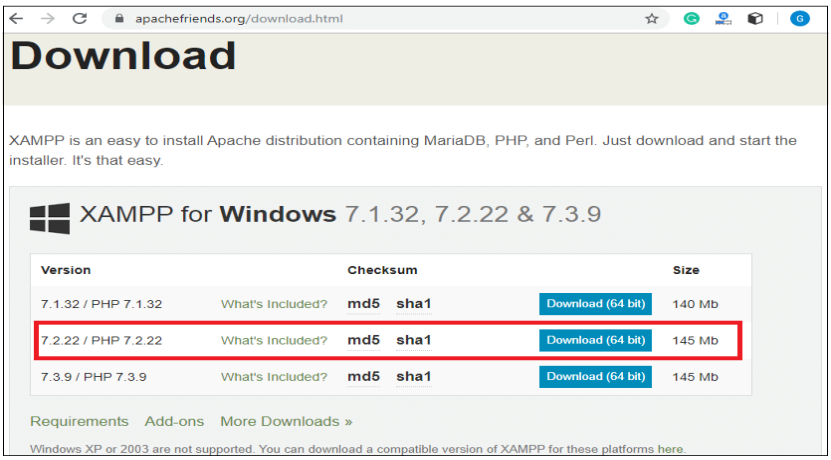
1. A web stack is the collection of software used for web development that incorporates, at a minimum, an operating system (OS), a programming language, database software and a web server.
2. A web stack, also known as a web application stack, is a type of solution stack.

Task:

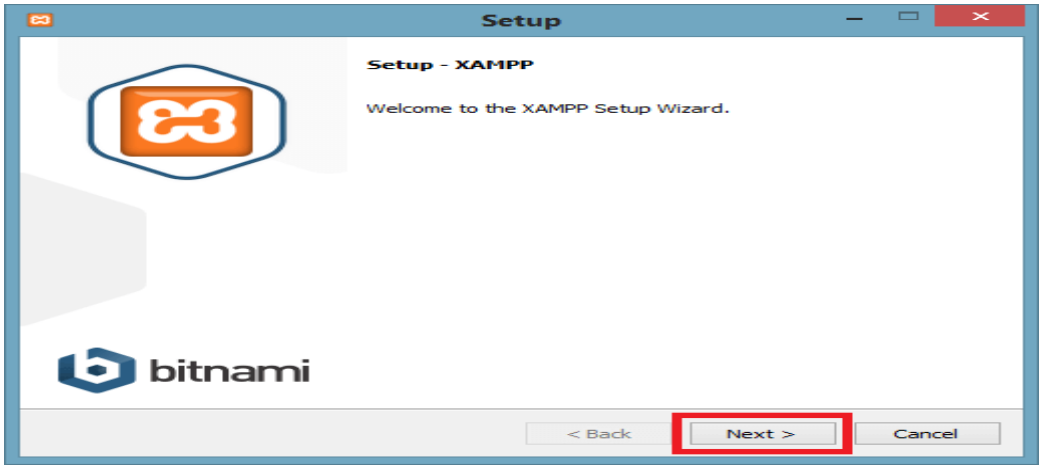
How to install XAMPP server on windows

We will learn how to install the XAMPP server on windows platform step by step. Follow the below steps and install the XAMPP server on your system.

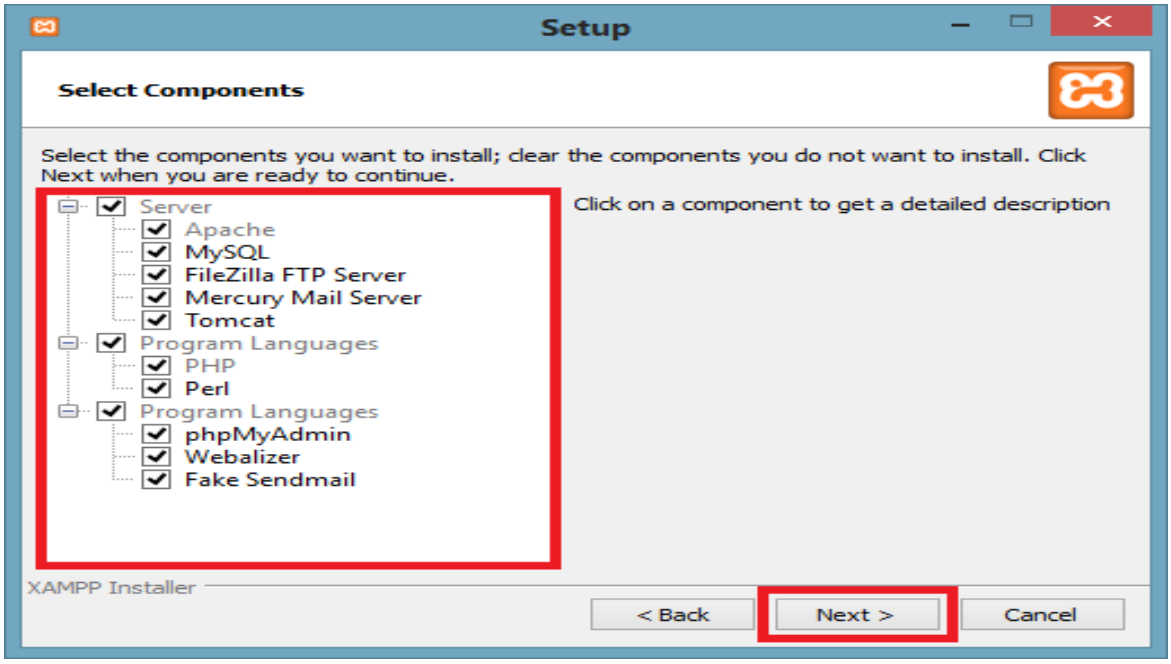
Step 1: Click on the above link provided to download the **XAMPP server** according to your window requirement.



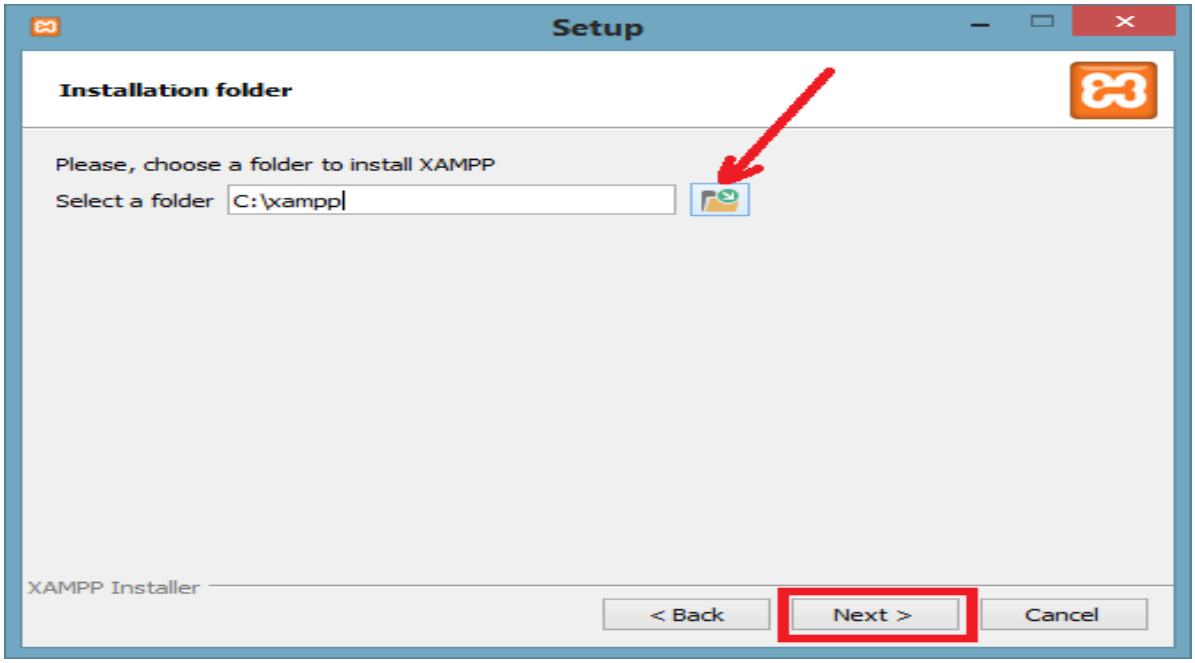
Step 2: After downloading XAMPP, double click on the downloaded file and allow XAMPP to make changes in your system. A window will pop-up, where you have to click on the **Next** button.



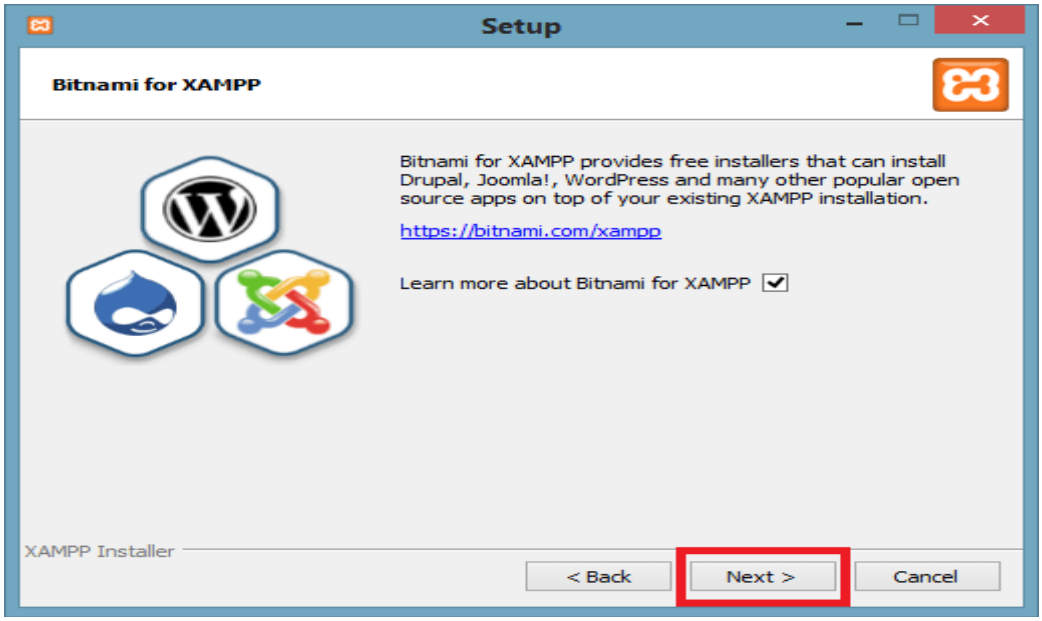
Step 3: Here, select the components, which you want to install and click **Next**.



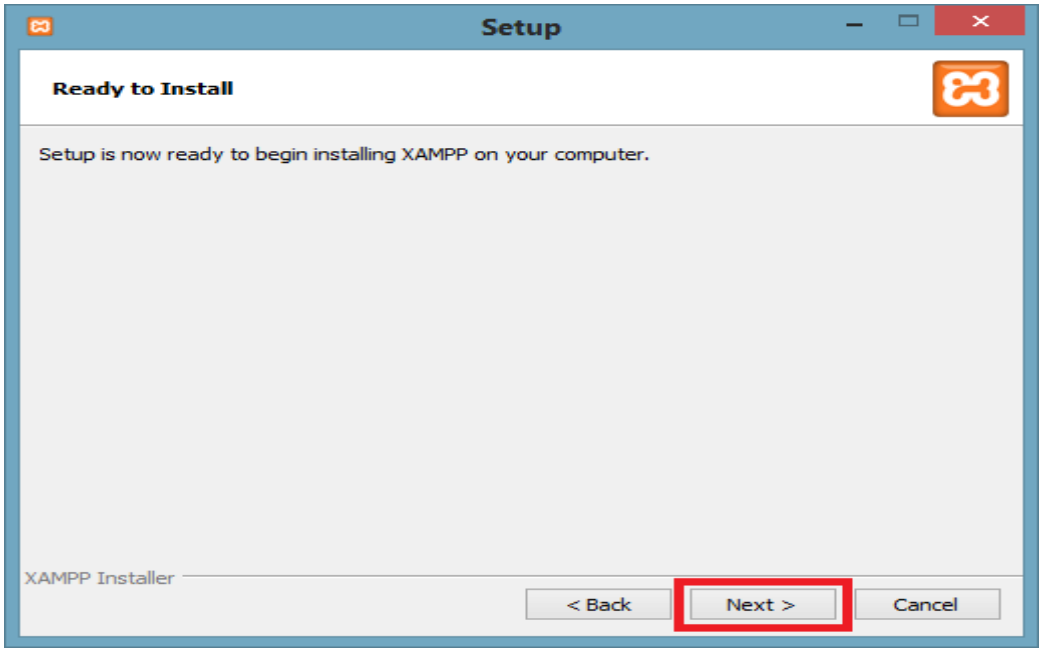
Step 4: Choose a folder where you want to install the XAMPP in your system and click **Next**.



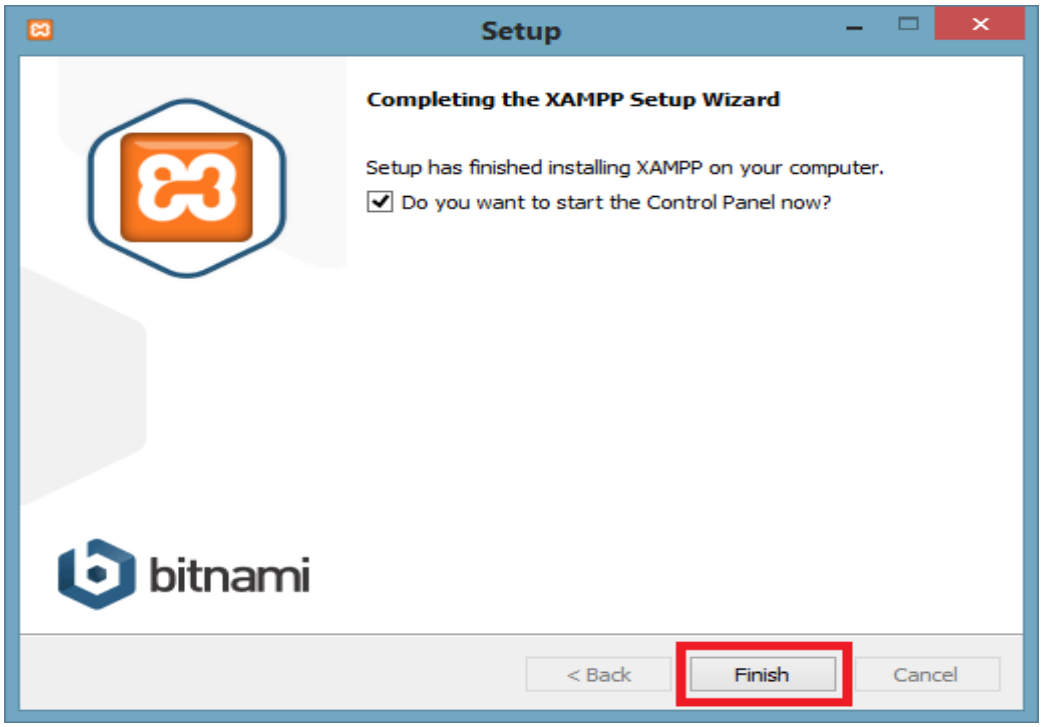
Step 5: Click **Next** and move ahead.



Step 6: XAMPP is ready to install, so click on the **Next** button and install the XAMPP.

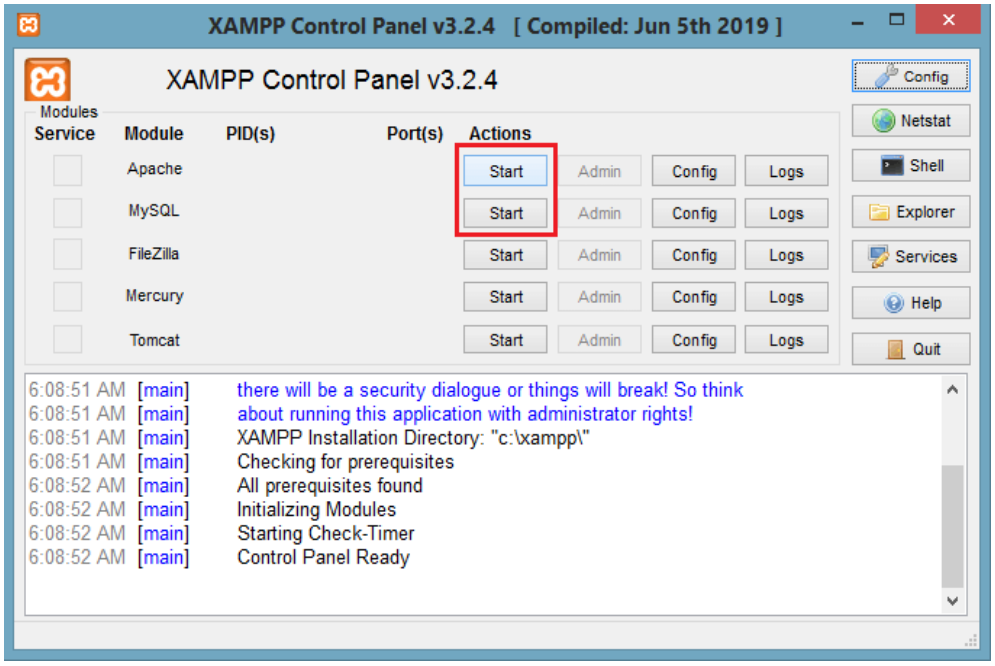


Step 7: A finish window will display after successful installation. Click on the **Finish** button.



Step 8: Choose your preferred language.

Step 9: XAMPP is ready to use. Start the Apache server and MySQL and run the php program on the localhost.



Step 10: If no error is shown, then XAMPP is running successfully.

How to run PHP programs in XAMPP

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.

For example - p1.php.

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

PHP program runs on a web browser such as - Chrome, Internet Explorer, Firefox, etc. Below some steps are given to run the PHP programs.

Step 1: Create a simple PHP program like hello world.

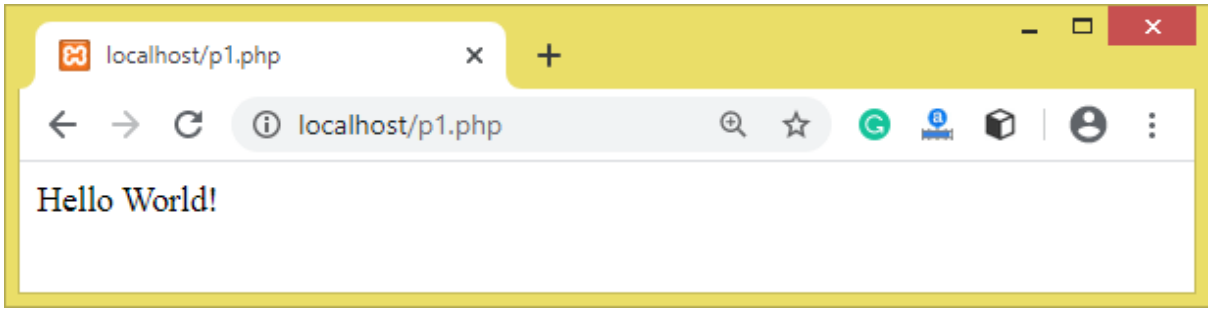
```
1. <?php
2.     echo "Hello World!";
3. ?>
```

Step 2: Save the file with **hello.php** name in the htdocs folder, which resides inside the xampp folder.

Step 3: Run the XAMPP server and start the Apache and MySQL.

Step 4: Now, open the web browser and type localhost *http://localhost/hello.php* on your browser window.

Step 5: The output for the above **hello.php** program will be shown as the screenshot below:



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

Step-1: