## Chapter 1: Introduction to PHP

## 1.1 What is PHP?

PHP (Hypertext Preprocessor) is a widely-used open-source server-side scripting language designed specifically for web development. It is embedded within HTML and is especially suited for creating dynamic web pages.

## 1.2 History and Evolution of PHP

1994: Created by Rasmus Lerdorf initially to track visits to his online resume.

1995: PHP Tools were released as Personal Home Page Tools.

1997: PHP/FI 2.0 introduced, adding more functionality.

2000: PHP 4.0 released, improving performance and scalability.

2015: PHP 7.0 was released, making significant strides in performance and language features.

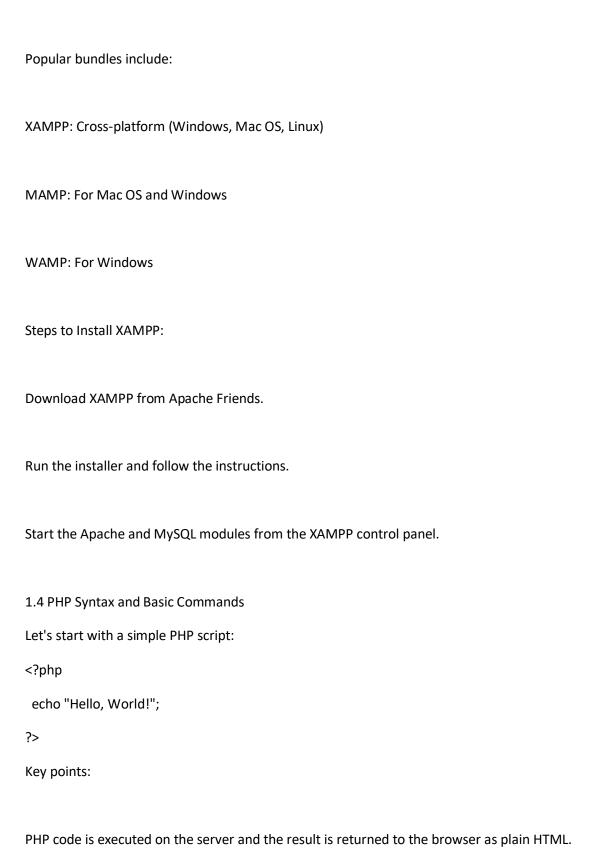
## 1.3 Setting Up the PHP Environment

To start coding in PHP, you'll need to set up a local environment on your computer. The most common way to do this is by installing a software bundle that includes:

Apache: A popular web server.

MySQL: A database management system.

PHP: The scripting language itself.



PHP scripts start with <?php and end with ?>.

The echo statement is used to output text to the screen.

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1.5 Writing Your First PHP Script
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Now let's write a PHP script that takes input from the user and displays a personalized message:
<!DOCTYPE html>
<html>
<head>
<title>My First PHP Page</title>
</head>
<body>
 <form method="POST">
  Enter your name: <input type="text" name="name">
  <input type="submit">
 </form>
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
  $name = htmlspecialchars($_POST['name']);
  echo "Hello, " . $name . "! Welcome to PHP.";
}
 ?>
</body>
</html>
```

Explanation:
The form uses the POST method to submit data.
The \$_SERVER["REQUEST_METHOD"] checks if the form has been submitted.
The htmlspecialchars function is used to prevent XSS attacks by converting special characters to HTML entities.