a) Develop a PHP program to illustrate the PHP Form handling by using GET and POST methods.

PHP provides two methods through which a client (browser) can send information to the server. These methods are given below, and discussed in detail:

1. GET method

2. POST method

- ➤ **Get and Post methods are the HTTP request methods used inside the <form> tag to send form data to the server.**
- ➤ **HTTP protocol enables the communication between the client and the server where a browser can be the client, and an application running on a computer system that hosts your website can be the server.**

GET method

The GET method is used to submit the HTML form data. This data is collected by the predefined $_GET variable for processing.

The information sent from an HTML form using the GET method is visible to everyone in the browser's address bar, which means that all the variable names and their values will be displayed in the URL. Therefore, the get method is not secured to send sensitive information.

For Example

1. localhost/gettest.php?username=Harry&bloodgroup=AB+

The bold part in the above URL is the variables name and italic part contains the values for their corresponding variable.

Example

The below code will display an HTML form containing two input fields and a submit button.

In this HTML form, we used the method = "get" to submit the form data.

file: test1.html

```html
1. <html>
2. <body>
3.
4. <form action = "gettest.php" method = "GET">
5. Username: <input type = "text" name = "username" /> <br>
6. Blood Group: <input type = "text" name = "bloodgroup" /> <br>
7. <input type = "submit" />
8. </form>
9.
10. </body>
11. </html>
```

Create gettest.php file, which will accept the data sent by HTML form.

file: gettest.php

```php
1. <html>
2. <body>
3.
4. Welcome <?php echo $_GET["username"]; ?> </br>
5. Your blood group is: <?php echo $_GET["bloodgroup"]; ?>
6.
```

7. </body>

8. </html>

When the user will click on Submit button after filling the form, the URL sent to the server could look something like this:

localhost/gettest.php?username=Harry&bloodgroup=AB

output will look like the below output:

Welcome Harry

Your blood group is: AB□Advantages of GET method (method = "get")

- You can bookmark the page with the specific query string because the data sent by the GET method is displayed in URL.
- GET requests can be cached.
- GET requests are always remained in the browser history.

Disadvantages of GET Method

- The GET method should not be used while sending any sensitive information.
- A limited amount of data can be sent using method = "get". This limit should not exceed 2048 characters.
- For security reasons, never use the GET method to send highly sensitive information like username and password, because it shows them in the URL.
- The GET method cannot be used to send binary data (such as images or word documents) to the server.

POST method

Similar to the GET method, the POST method is also used to submit the HTML form data. But the data submitted by this method is collected by the predefined superglobal

variable $_POST instead of $_GET.

- **Unlike the GET method, it does not have a limit on the amount of information to be sent. The**
- **information sent from an HTML form using the POST method is not visible to anyone.**

For Example

1. localhost/posttest.php

With the help of an example, let's understand how the POST method works⬛Example

The below code will display an HTML form containing two input fields and a submit button.

In this HTML form, we used the method = "post" to submit the form data.

file: test2.html

1. <html>

2. <body>

3.

4. <form action = "posttest.php" method = "post">

**5. Username: <input type = "text" name = "username" />
**

**6. Blood Group: <input type = "text" name = "bloodgroup" />
**

7. <input type = "submit" />

8. </form>

9.

10. </body>

11. </html>

Now create posttest.php file to accept the data sent by

Now create posttest.php file to accept the data sent by HTML form.

file: posttest.php

1. <html>

2. <body>

3.

4. Welcome <?php echo $_POST["username"]; ?> </br>

5. Your blood group is: <?php echo $_POST["bloodgroup"]; ?>

6.

7. </body>

8. </html>

When the user will click on Submit button after filling the form, the URL sent to the server could look something like this:

localhost/posttest.php

The output will look like the below output:

Welcome Harry

Your blood group is: O+

Advantages of POST method (method = "post")

- **The POST method is useful for sending any sensitive information because the information sent using the POST method is not visible to anyone.**

- **There is no limitation on size of data to be sent using the POST Method. You can send a large amount of information using this method.**

- **Binary and ASCII data can also be sent using the POST method.**

- **Data security depends on the HTTP protocol because the information sent using the POST method goes through the**

HTTP header. By using secure HTTP, you can ensure that your data is safe.

Disadvantages of POST Method

- POST requests do not cache.
- POST requests never remain in the browser history.
- It is not possible to bookmark the page because the variables are not displayed in   URL.

b) Develop a PHP program to demonstrate the importance of include() and require() functions.

PHP allows us to create various elements and functions, which are used several times in many pages. It takes much time to script these functions in multiple pages. Therefore, use the concept of file inclusion that helps to include files in various programs and saves the effort of writing code multiple times.

"PHP allows you to include file so that a page content can be reused many times. It is very helpful to include files when you want to apply the same HTML or PHP code to multiple pages of a website." There are two ways to include file in PHP.

1. include

2. require

- Both include and require are identical to each other, except failure.
- include only generates a warning, i.e., E_WARNING, and continue the execution of the script.
- require generates a fatal error, i.e., E_COMPILE_ERROR, and stop the execution of the script.

Code Reusability: By the help of include and require construct, we can reuse HTML code or PHP script in many PHP scripts.

Easy editable: If we want to change anything in webpages, edit the source file included in all webpage rather than editing in all the files separately.

PHP include

PHP include is used to include a file on the basis of given path. You may use a relative or absolute path of the file.

Syntax

There are two syntaxes available for include:

1. include 'filename ';

Or

2. include ('filename');

Examples

Let's see a simple PHP include example.

File: menu.html

1. Home |

2. PHP |

3. Java |

4. HTML

File: include1.php

1. <?php include("menu.html"); ?>

2. <h1>This is Main Page</h1>

Output:

Home |

PHP |

Java |

HTML

This is Main Page

PHP require

PHP require is similar to include, which is also used to include files. The only difference is that

it stops the execution of script if the file is not found whereas include doesn't.

Syntax

There are two syntaxes available for require:

1. require 'filename';

Or

2. require ('filename');

Examples

Let's see a simple PHP require example.

File: menu.html

1. Home |

2. PHP |

3. Java |

4. HTML

```
1. <?php require("menu.html"); ?>
2. <h1>This is Main Page</h1>
```

Output:

 Home |

PHP |

Java |

HTML

This is Main Page