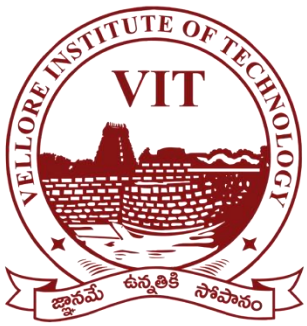


VIT-AP UNIVERSITY

WEB TECHNOLOGIES
LAB-6

NAME:
SUDANA SHASHI KIRAN

REDG NUMBER:
21BCE8644

PROFFESOR:
DR. SHAIK KAREEMULLA

1. Design a web page to use various filters in PHP for server-side validation.

a. Validate an integer

b. Validate a float variable

c. Validate a Boolean variable

d. Validate an IP address

e. Validate an URL

f. Sanitize an integer

g. Sanitize an IP address

h. Sanitize an URL

i. Sanitize a float variable

j. Sanitize a Boolean variable

CODE:

FOR VALIDATION:

Valid_sanitization.php:

```
<!DOCTYPE html>
<html>
<head>
   <title>PHP Filters</title>
<h1>NAME:SUDANA SHASHI KIRAN </h1>
<h1>RED NUMBER : 21BCE8644 </h1>
   <style>
      body {
         font-family: Arial, sans-serif;
         margin: 0;
```

```
    padding: 0;
    background-color: #f2f2f2;
}

.container {
    max-width: 500px;
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

h1 {
    text-align: center;
    margin-bottom: 20px;
}

form label {
    display: block;
    margin-bottom: 10px;
}

form input[type="text"],
form input[type="submit"] {
    width: 100%;
    padding: 10px;
```

```
        margin-bottom: 15px;
        border: 1px solid #ccc;
        border-radius: 5px;
    }

    form input[type="submit"] {
        background-color: #4CAF50;
        color: #fff;
        cursor: pointer;
    }

    form input[type="submit"]:hover {
        background-color: #45a049;
    }

    .error-message {
        color: #f00;
        margin-bottom: 10px;
    }

    .valid-message {
        color: #0a0;
        margin-bottom: 10px;
    }
  </style>
</head>
```

```
<body>

   <div class="container">

      <h1>PHP Filters Example</h1>

      <form method="post" action="<?php echo
htmlspecialchars($_SERVER["PHP_SELF"]); ?>">

         <label>Integer:</label>

         <input type="text" name="integer_input"><br>


         <label>Float:</label>

         <input type="text" name="float_input"><br>


         <label>Boolean:</label>

         <input type="text" name="boolean_input"><br>


         <label>IP Address:</label>

         <input type="text" name="ip_input"><br>


         <label>URL:</label>

         <input type="text" name="url_input"><br>


         <input type="submit" value="Submit"><br>

      </form>


      <?php

      if ($_SERVER["REQUEST_METHOD"] == "POST") {

         // Validate and Sanitize an integer

         if (isset($_POST['integer_input'])) {
```

```
        $integer = filter_var($_POST['integer_input'], FILTER_VALIDATE_INT);

        if ($integer === false) {
            echo "<div class='error-message'>Invalid integer input!</div>";
        } else {
            $sanitizedInteger = filter_var($integer, FILTER_SANITIZE_NUMBER_INT);
            echo "<div class='valid-message'>Valid integer: " . $sanitizedInteger . "</div>";
        }
    }

    // Validate and Sanitize a float
    if (isset($_POST['float_input'])) {
        $float = filter_var($_POST['float_input'], FILTER_VALIDATE_FLOAT);

        if ($float === false) {
            echo "<div class='error-message'>Invalid float input!</div>";
        } else {
            $sanitizedFloat = filter_var($float, FILTER_SANITIZE_NUMBER_FLOAT,
FILTER_FLAG_ALLOW_FRACTION);
            echo "<div class='valid-message'>Valid float: " . $sanitizedFloat . "</div>";
        }
    }

    // Validate and Sanitize a boolean
    if (isset($_POST['boolean_input'])) {
        $boolean = filter_var($_POST['boolean_input'], FILTER_VALIDATE_BOOLEAN,
FILTER_NULL_ON_FAILURE);
```

```
        if ($boolean === null) {
            echo "<div class='error-message'>Invalid boolean input!</div>";
        } else {
            echo "<div class='valid-message'>Valid boolean: " . var_export($boolean, true) .
"</div>";
        }
    }

    // Validate and Sanitize an IP address
    if (isset($_POST['ip_input'])) {
        $ip = filter_var($_POST['ip_input'], FILTER_VALIDATE_IP);

        if ($ip === false) {
            echo "<div class='error-message'>Invalid IP address input!</div>";
        } else {
            $sanitizedIP = filter_var($ip, FILTER_SANITIZE_STRING);
            echo "<div class='valid-message'>Valid IP address: " . $sanitizedIP . "</div>";
        }
    }

    // Validate and Sanitize a URL
    if (isset($_POST['url_input'])) {
        $url = filter_var($_POST['url_input'], FILTER_VALIDATE_URL);

        if ($url === false) {
            echo "<div class='error-message'>Invalid URL input!</div>";
```

```
            } else {
                $sanitizedURL = filter_var($url, FILTER_SANITIZE_URL);
                echo "<div class='valid-message'>Valid URL: " . $sanitizedURL . "</div>";
            }
        }
    }
    ?>
  </div>
</body>
</html>
```

FOR SANITIZATION:

Sanitize.html:

```
<!DOCTYPE html>
<html>
<head>
  <title>PHP Filter Validation</title>
<h1>NAME:SUDANA SHASHI KIRAN </h1>
<h1>RED NUMBER : 21BCE8644 </h1>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 0;
      padding: 0;
      background-color: #f2f2f2;
    }
```

```
.container {
    max-width: 500px;
    margin: 0 auto;
    padding: 20px;
    background-color: #fff;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}

h1 {
    text-align: center;
    margin-bottom: 20px;
}

form label {
    display: block;
    margin-bottom: 10px;
}

form input[type="text"],
form input[type="submit"] {
    width: 100%;
    padding: 10px;
    margin-bottom: 15px;
    border: 1px solid #ccc;
    border-radius: 5px;
}
```

```
        form input[type="submit"] {
            background-color: #4CAF50;
            color: #fff;
            cursor: pointer;
        }

        form input[type="submit"]:hover {
            background-color: #45a049;
        }

        .error-message {
            color: #f00;
            margin-bottom: 10px;
        }

        .valid-message {
            color: #0a0;
            margin-bottom: 10px;
        }
    </style>
</head>
<body>
    <h2>Enter Data to be Sanitized:</h2>
    <form action="process_form_1.php" method="post">
        <label for="integer_input">Integer:</label>
```

```
        <input type="text" id="integer_input" name="integer_input" required><br>

        <label for="ip_address_input">IP Address:</label>
        <input type="text" id="ip_address_input" name="ip_address_input" required><br>

        <label for="url_input">URL:</label>
        <input type="text" id="url_input" name="url_input" required><br>

        <label for="float_input">Float:</label>
        <input type="text" id="float_input" name="float_input" required><br>

        <label for="boolean_input">Boolean:</label>
        <input type="text" id="boolean_input" name="boolean_input" required><br>

        <input type="submit" value="Submit">
    </form>
</body>
</html>
```

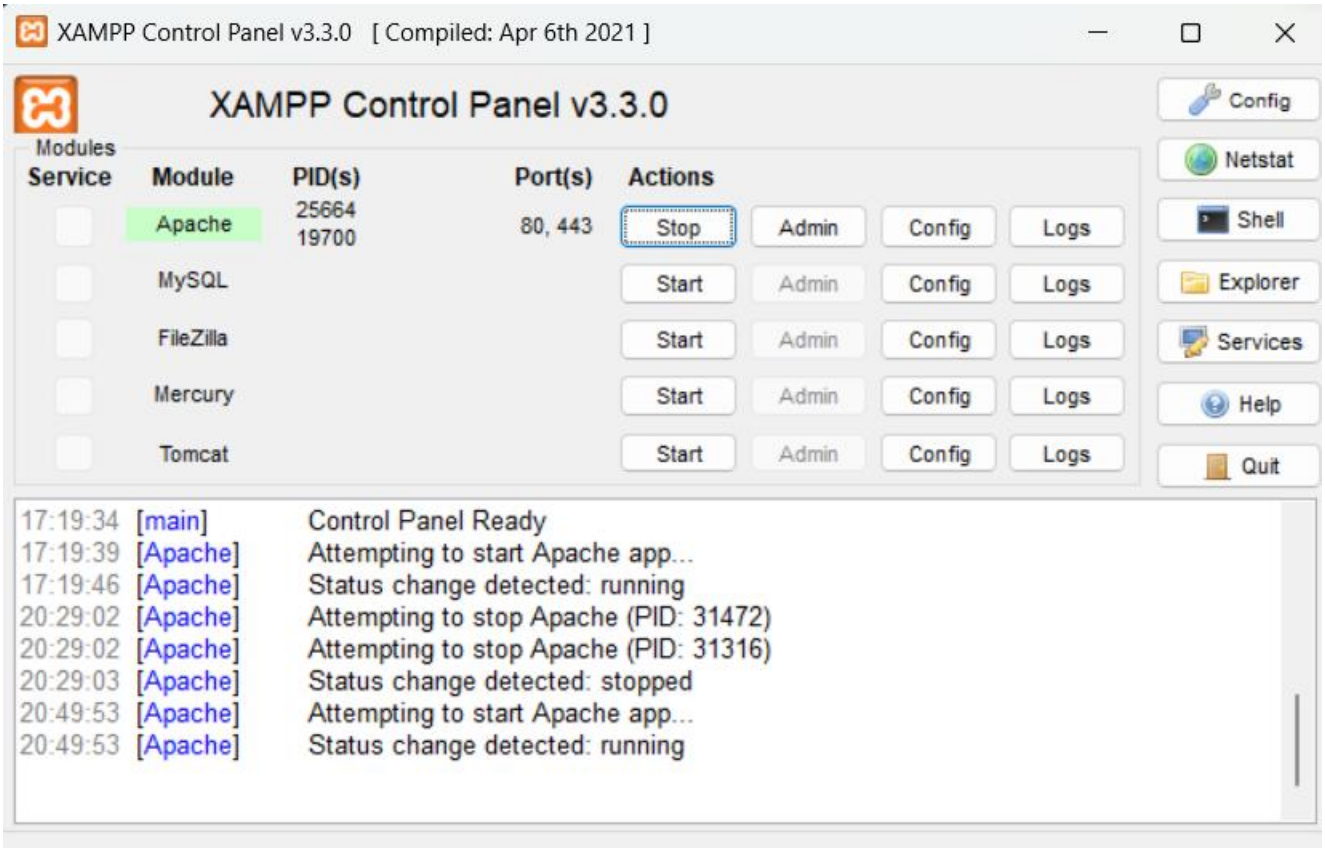
process_form_1.php:

```
<?php
function sanitize_integer($input_str) {
    return preg_replace('/[^0-9]/', '', $input_str);
}

function sanitize_ip_address($ip_address) {
    preg_match('/\b\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}\b/', $ip_address, $matches);
```

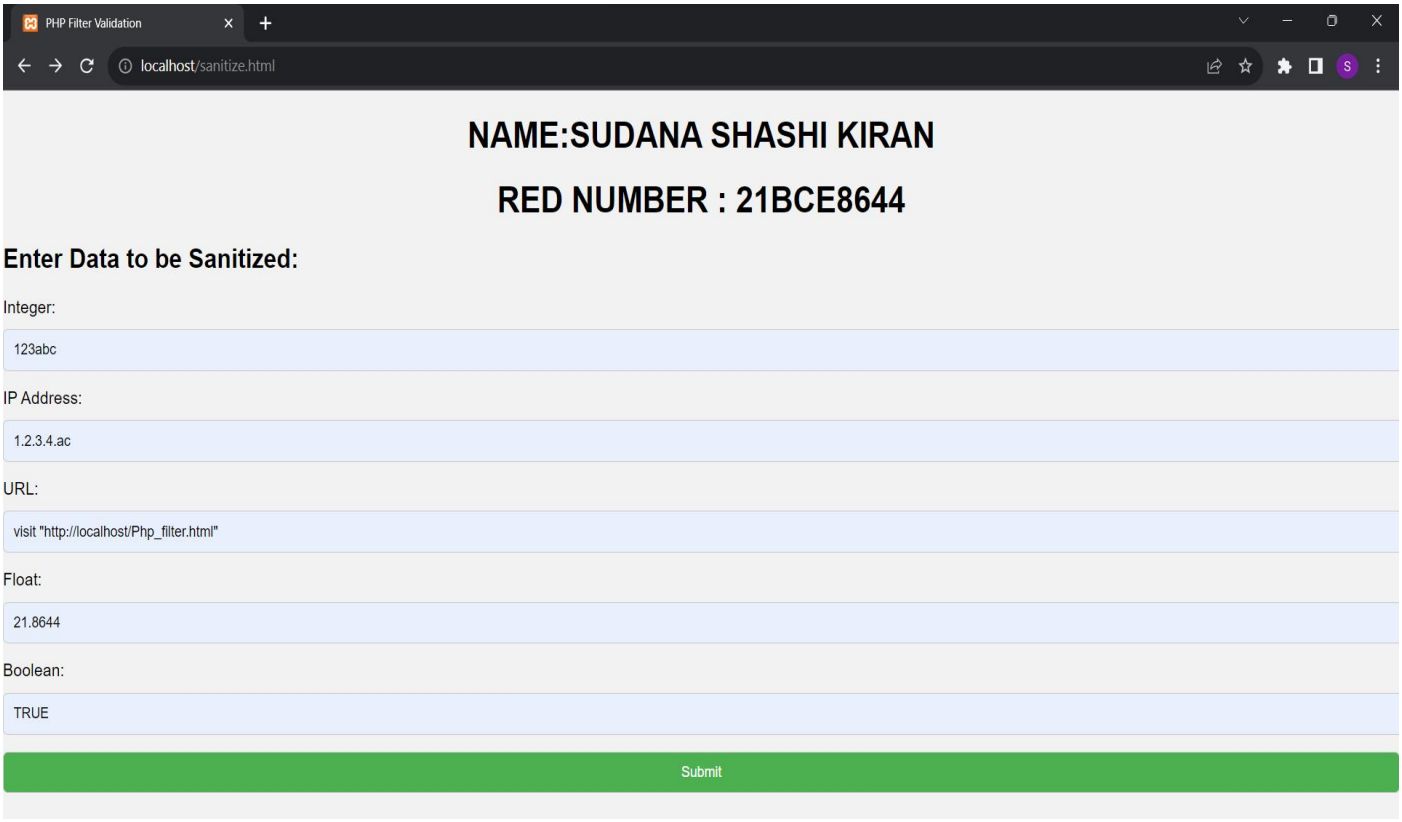
```
    return isset($matches[0]) ? $matches[0] : null;
}

function sanitize_url($url) {
    preg_match('/(https?:\/\/\S+)/', $url, $matches);
    return isset($matches[0]) ? $matches[0] : null;
}

function sanitize_float($input_str) {
    return preg_replace('/[^0-9.]/', '', $input_str);
}

function sanitize_boolean($input_str) {
    return strtolower($input_str) === 'true' || strtolower($input_str) === 'yes' || $input_str === '1';
}

// Check if the form was submitted
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    // Sanitize the inputs
    $sanitized_integer = sanitize_integer($_POST["integer_input"]);
    $sanitized_ip_address = sanitize_ip_address($_POST["ip_address_input"]);
    $sanitized_url = sanitize_url($_POST["url_input"]);
    $sanitized_float = sanitize_float($_POST["float_input"]);
    $sanitized_boolean = sanitize_boolean($_POST["boolean_input"]);

    // Display the sanitized data
```

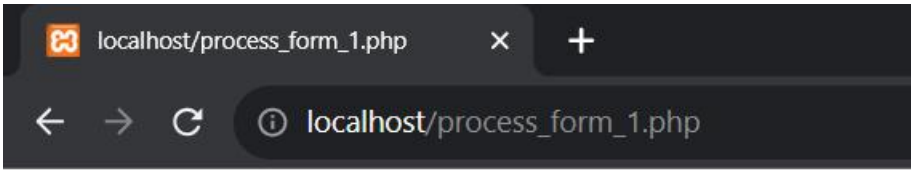
```
    echo "<h2>Sanitized Data:</h2>";
    echo "Sanitized Integer: " . $sanitized_integer . "<br>";
    echo "Sanitized IP Address: " . $sanitized_ip_address . "<br>";
    echo "Sanitized URL: " . $sanitized_url . "<br>";
    echo "Sanitized Float: " . $sanitized_float . "<br>";
    echo "Sanitized Boolean: " . var_export($sanitized_boolean, true) . "<br>";
} else {
    // If the form was not submitted, display an error message
    echo "<h2>Error:</h2>";
    echo "Please submit the form.";
}
?>
```

OUTPUT:



FOR SANITIZATION:

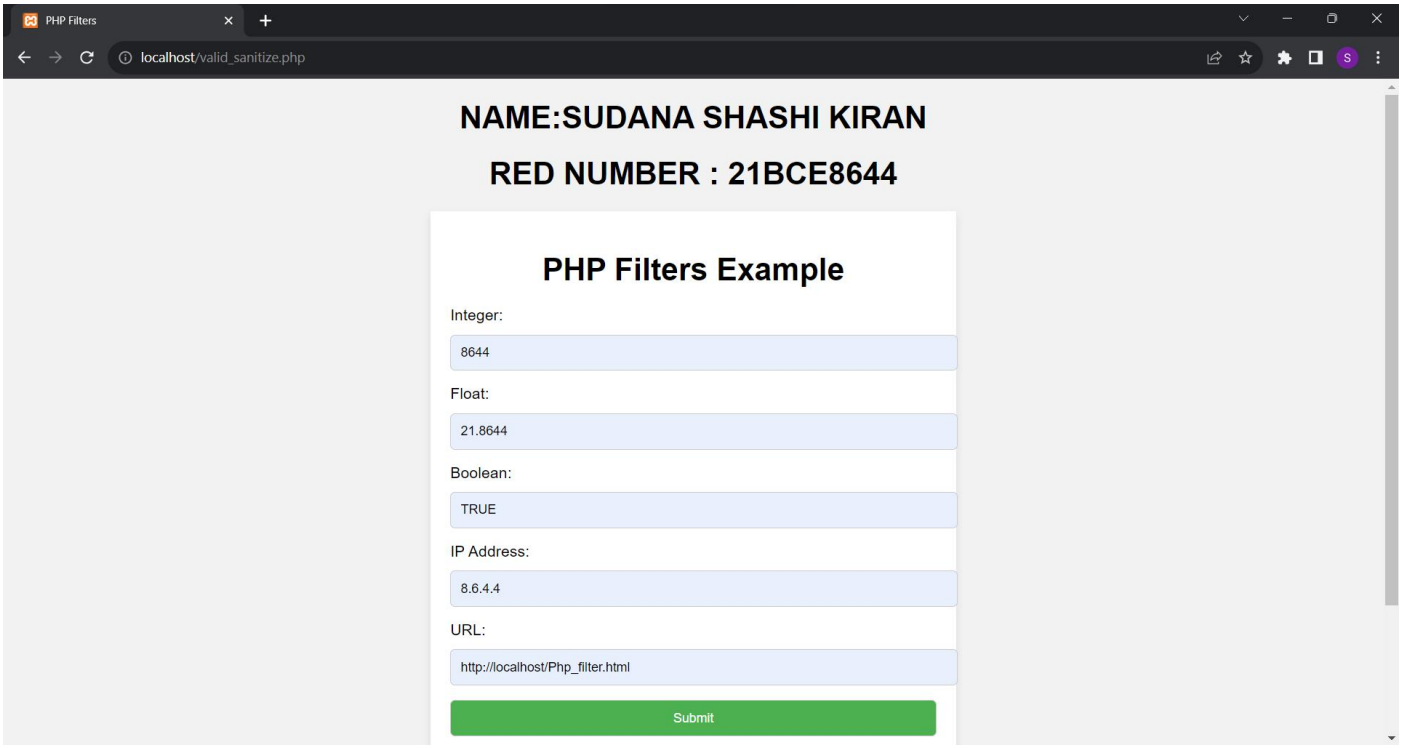


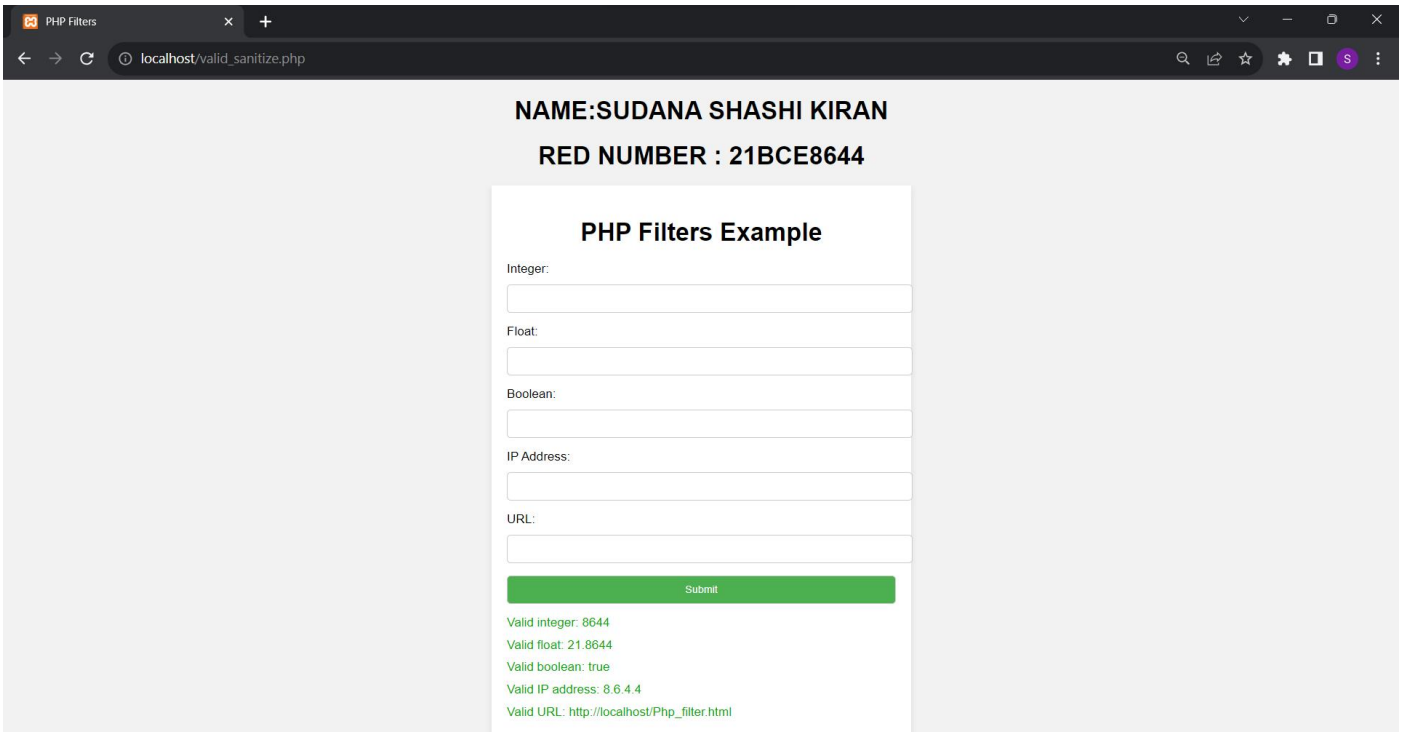


Sanitized Data:

Sanitized Integer: 123
Sanitized IP Address: 1.2.3.4
Sanitized URL: http://localhost/Php_filter.html"
Sanitized Float: 21.8644
Sanitized Boolean: true

FOR VALIDATION:





2. Develop an web page to use various file handling function available in PHP.

CODE:

```
<!DOCTYPE html>
<html>
<head>
  <title>PHP File Handling Example</title>
  <style>
    body {
      background-color: #f0f0f0;
      font-family: Arial, sans-serif;
      color: #333;
      line-height: 1.6;
      max-width: 800px;
      margin: 0 auto;
      padding: 20px;
    }

    h1 {
      color: #007bff;
    }

    h2 {
      color: #ff7a59;
      margin-top: 30px;
    }

    pre {
```

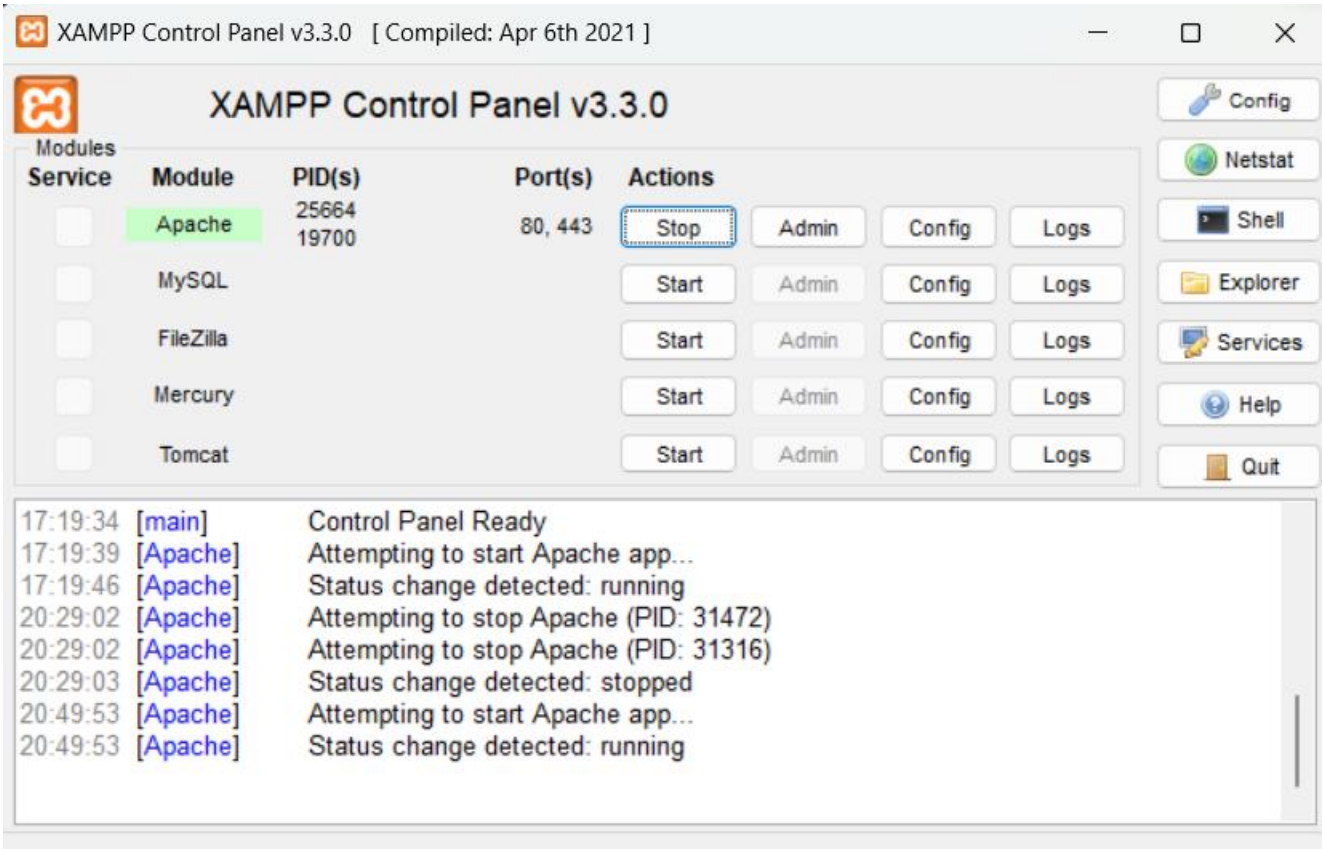
```
        background-color: #f8f8f8;
        padding: 10px;
        border: 1px solid #ccc;
        border-radius: 5px;
    }

    p {
        margin-bottom: 15px;
    }

    .button {
        display: inline-block;
        background-color: #007bff;
        color: #fff;
        padding: 10px 20px;
        border: none;
        border-radius: 5px;
        cursor: pointer;
        text-decoration: none;
    }

    .button:hover {
        background-color: #0056b3;
    }
  </style>
</head>
```

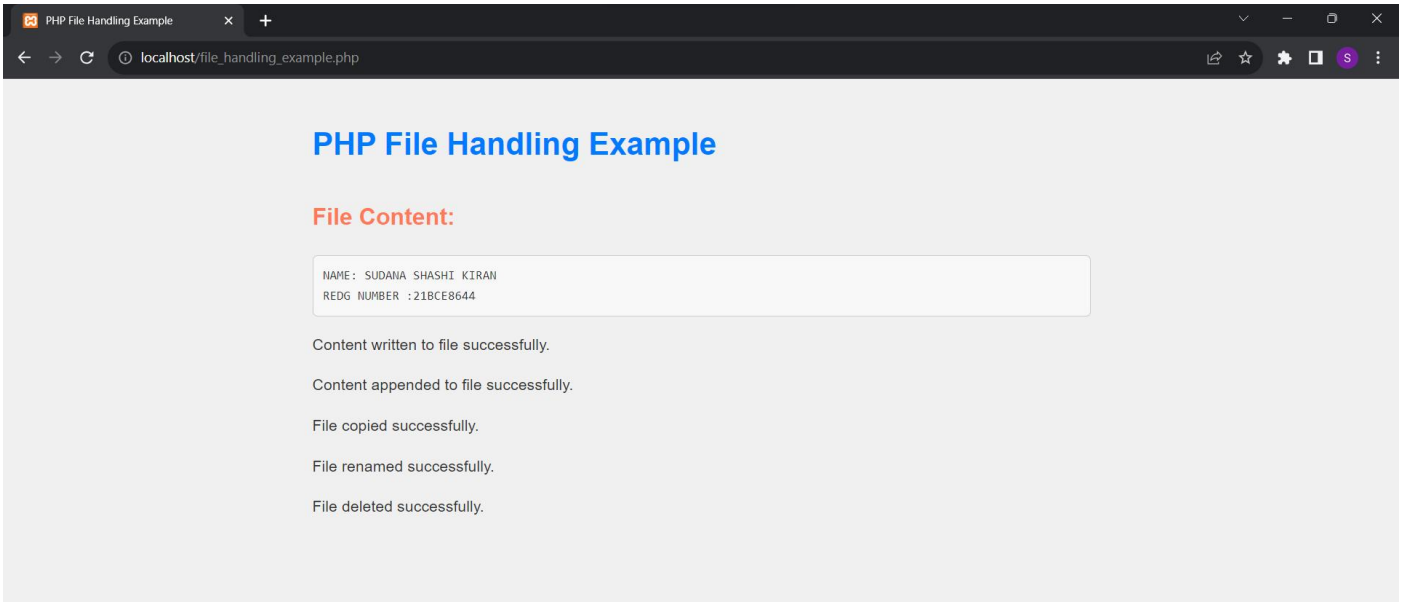
```
<body>
    <h1>PHP File Handling Example</h1>

    <?php
    // File paths
    $file_path = "newfile.txt";
    $new_file_path = "new_file.txt";

    // Function to read a file and display its contents
    function read_file($file_path) {
        if (file_exists($file_path)) {
            $content = file_get_contents($file_path);
            echo "<h2>File Content:</h2>";
            echo "<pre>" . htmlspecialchars($content) . "</pre>";
        } else {
            echo "<p>File not found.</p>";
        }
    }

    // Function to write to a file
    function write_to_file($file_path, $content) {
        file_put_contents($file_path, $content);
        echo "<p>Content written to file successfully.</p>";
    }

    // Function to append to a file
```

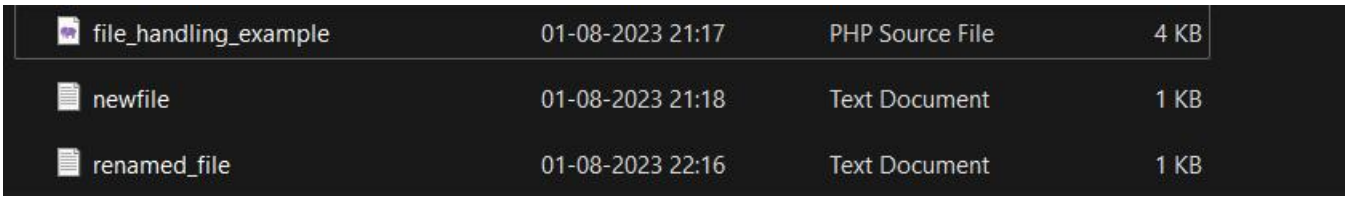
```
function append_to_file($file_path, $content) {
    file_put_contents($file_path, $content, FILE_APPEND);
    echo "<p>Content appended to file successfully.</p>";
}

// Function to copy a file
function copy_file($source, $destination) {
    if (copy($source, $destination)) {
        echo "<p>File copied successfully.</p>";
    } else {
        echo "<p>Failed to copy the file.</p>";
    }
}

// Function to rename a file
function rename_file($file_path, $new_file_path) {
    if (rename($file_path, $new_file_path)) {
        echo "<p>File renamed successfully.</p>";
    } else {
        echo "<p>Failed to rename the file.</p>";
    }
}

// Function to delete a file
function delete_file($file_path) {
    if (unlink($file_path)) {
```

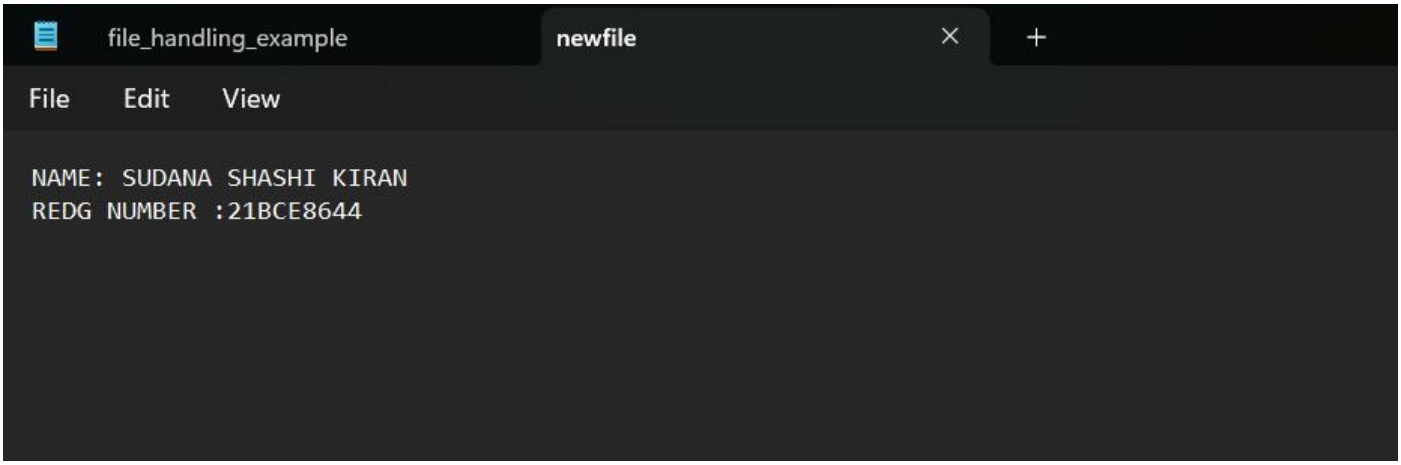
```
        echo "<p>File deleted successfully.</p>";
    } else {
        echo "<p>Failed to delete the file.</p>";
    }
}

// Example usage
read_file($file_path);

$content_to_write = "This is a new content to write to the file.";
write_to_file($new_file_path, $content_to_write);

$content_to_append = "\nThis content will be appended to the file.";
append_to_file($new_file_path, $content_to_append);

$copied_file_path = "copied_file.txt";
copy_file($new_file_path, $copied_file_path);

$new_name_for_file = "renamed_file.txt";
rename_file($new_file_path, $new_name_for_file);

delete_file($copied_file_path);
?>

</body>
</html>
```

OUTPUT:


XAMPP Control Panel v3.3.0 [Compiled: Apr 6th 2021]
XAMPP Control Panel v3.3.0
Modules
Service
Module
PID(s)
Port(s)
Actions
Apache
25664
19700
80, 443
Stop
Admin
Config
Logs
MySQL
Start
FileZilla
Mercury
Tomcat
Config
Netstat
Shell
Explorer
Services
Help
Quit
17:19:34 [main] Control Panel Ready
17:19:39 [Apache] Attempting to start Apache app...
17:19:46 [Apache] Status change detected: running
20:29:02 [Apache] Attempting to stop Apache (PID: 31472)
20:29:02 [Apache] Attempting to stop Apache (PID: 31316)
20:29:03 [Apache] Status change detected: stopped
20:49:53 [Apache] Attempting to start Apache app...
20:49:53 [Apache] Status change detected: running


PHP File Handling Example
localhost/file_handling_example.php
PHP File Handling Example
File Content:
NAME: SUDANA SHASHI KIRAN
REDG NUMBER :21BCE8644
Content written to file successfully.
Content appended to file successfully.
File copied successfully.
File renamed successfully.
File deleted successfully.


file_handling_example 01-08-2023 21:17 PHP Source File 4 KB
newfile 01-08-2023 21:18 Text Document 1 KB
renamed_file 01-08-2023 22:16 Text Document 1 KB


file_handling_example
newfile
File
Edit
View
NAME: SUDANA SHASHI KIRAN
REDG NUMBER :21BCE8644