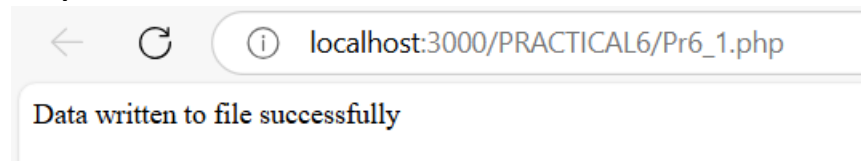# PRACTICAL – 6

Aim: Perform following programs of PHP file handling.

1. Write a PHP Program that Insert the data in File.

Code:

```php
<?php
$file = fopen("Pr6_1.txt", "w");
fwrite($file, "Hello Dhruv-23012022021 Team id 070205 @HexCodeBreaker , This is an example
of file handling in PHP");
fclose($file);
echo "Data written to file successfully";
?>
```

Output:

Data written to file successfully

2. Write a PHP Program that Counts the Number of Vowels, Consonants, Spaces, Special Characters and Digits from the Given File.

Code:

```php
<?php
$file = fopen("Pr6_1.txt", "r");
$fp = fread($file, filesize("Pr6_1.txt"));
$VowelCount = 0;
$ConsonantCount = 0;
$SpaceCount = 0;
$SpecialCharCount = 0;
$digitCount = 0;
strtolower($fp);
$length = filesize("Pr6_1.txt");
$vowels = array('a','e','i','o','u');
$specialChar = array('!','@','#','$','%','^','&','*','(',')','_','+','-','=');
$digit = array('0','1','2','3','4','5','6','7','8','9');
$space = array(' ');
for($i=0; $i<$length; $i++){
    if(in_array($fp[$i],$vowels)){
        $VowelCount++;
    }
    else if(in_array($fp[$i],$specialChar)){
        $SpecialCharCount++;
    }
    else if (in_array($fp[$i],$digit)){
```

```php
        $digitCount++;
    }
    else if (in_array($fp[$i],$space)){
        $SpaceCount++;
    }
    else{
        $ConsonantCount++;
    }
}
echo "Data in File : ".$fp."<br>";
echo "Total Vowels in File : ".$VowelCount."<br>";
echo "Total Consonants in File : ".$ConsonantCount."<br>";
echo "Total Special Characters in File : ".$SpecialCharCount."<br>";
echo "Total Digits in File : ".$digitCount."<br>";
echo "Total Spaces in File : ".$SpaceCount."<br>";
?>
```

Output:

Data in File : Hello Dhruv-23012022021 Team id 070205 @HexCodeBreaker , This is an example of file handling in PHP
Total Vowels in File : 24
Total Consonants in File : 41
Total Special Characters in File : 2
Total Digits in File : 17
Total Spaces in File : 15

3. **Write a PHP program to create a student registration form with validation for fields including Enrollment No., Full Name, Gender, Mobile, Email, Address, and Profile Photo. Implement validation for Full Name, Mobile, Email, and Profile Photo inputs. Store all submitted data in a CSV file.**

Code:

```php
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $errors = [];
    $name = $_POST['name'] ?? '';
    $enrollment = $_POST['enrollment'] ?? '';
    $number = $_POST['number'] ?? '';
    $email = $_POST['email'] ?? '';
    $address = $_POST['address'] ?? '';
    $gender = $_POST['gender'] ?? '';
    if (!preg_match("/^[a-zA-Z ]+$/", $name)) $errors['name'] = 'Only Text is Allowed';
    if (!preg_match("/^[0-9]{10}$/", $number)) $errors['number'] = 'Invalid Mobile Number';
    if (!filter_var($email, FILTER_VALIDATE_EMAIL)) $errors['email'] = 'Invalid Email!';
    if (isset($_FILES['profile_photo']) && $_FILES['profile_photo']['error'] == 0) {
        $file = $_FILES['profile_photo']['name'];
```

```php
    $allowedTypes = ['image/jpeg', 'image/png'];

    if (!in_array($_FILES['profile_photo']['type'], $allowedTypes)) {
      $errors['profile_photo'] = 'Only .jpg and .png files are allowed';
    }
  } else {
    $errors['profile_photo'] = 'Profile Photo is required';
  }
  if (empty($errors)) {
    $csvfile = fopen("Student.csv", 'a');
    if ($csvfile) {
      fputcsv($csvfile, [$name, $number, $email, $address, $gender, $file]);
      fclose($csvfile);
      $success = "Student Data Inserted Successfully!";
    } else {
      $errors['csv'] = 'Error in writing to CSV file';
    }
  }
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>User Profile</title>
</head>
<body>
  <h1>Contact Form</h1>
  <p><?php echo $success ?? ''; ?></p>
  <form method="POST" action="" enctype="multipart/form-data">
    <table border="1">
      <tr>
        <td>Name:</td>
        <td><input type="text" name="name" required></td>
      </tr><tr>
        <td>Enrollment No:</td>
        <td><input type="text" name="enrollment" required></td>
      </tr><tr>
        <td>Number:</td>
        <td><input type="text" name="number" required></td>
```

```
        </tr><tr>
          <td>Email:</td>
          <td><input type="email" name="email" required></td>
        </tr><tr>
          <td>Address:</td>
          <td><input type="text" name="address" required></td>
        </tr><tr>
          <td>Gender:</td>
          <td>
            <input type="radio" name="gender" value="male">Male
            <input type="radio" name="gender" value="female">Female
          </td>
        </tr><tr>
          <td><label for="profile_photo">Profile Photo</label></td>
          <td><input type="file" id="profile_photo" name="profile_photo" required></td>
        </tr><tr>
          <td><input type="submit" value="Submit"></td>
          <td><input type="reset" value="Reset"></td>
        </tr>
      </table>
  </form>
</body>
</html>
```

Output:

```
PRACTICAL6 >  Student.csv
  1   "Dhruv Prashantrao Shere",9316846548,sheredhruv@gmail.com,"B-14/1 Panchtirth Soc., Naroda, Ahmedabad-382330",male,5_edited.
      jpg
```

4. **Create a form with a file input field to allow users to upload files. Implement server-side PHP code to handle the uploaded file:**
   a. **Validate the file type and size to prevent malicious uploads and ensure server resource management.**
   b. **Move the uploaded file to a secure location on the server.**
   c. **Provide feedback to the user on the success or failure of the upload process.**

Code:

```php
<?php
$success = "";
$error = "";
if ($_SERVER["REQUEST_METHOD"] == "POST") {
   if (isset($_FILES['file']) && $_FILES['file']['error'] == 0) {
      $fileName = $_FILES['file']['name'];
      $fileSize = $_FILES['file']['size'];
      $fileType = $_FILES['file']['type'];
      $tempFile = $_FILES['file']['tmp_name'];
      $maxSize = 2 * 1024 * 1024; // 2MB limit
      $allowedTypes = ['image/jpeg', 'image/png', 'application/pdf'];
      if (!isset($_POST['target_dir']) || empty($_POST['target_dir'])) {
         $error = "Please specify a target directory.";
      } else {
         $targetDir = rtrim($_POST['target_dir'], '/') . '/';
         // Check if directory exists using file_exists()
         if (!file_exists($targetDir)) {
            $error = "The specified directory does not exist. Please create it manually.";
         } else {
            // Validate file type and size
            if (!in_array($fileType, $allowedTypes)) {
               $error = "Only JPG, PNG, and PDF files are allowed.";
            } elseif ($fileSize > $maxSize) {
               $error = "File size must not exceed 2MB.";
            } else {
               $targetFile = $targetDir . $fileName;
               if (move_uploaded_file($tempFile, $targetFile)) {
                  $success = "File uploaded successfully to: " . $targetFile;
               } else {
                  $error = "Error moving file.";
               }}}}
```

```
        } else {
            $error = "No file uploaded or an error occurred.";
        }}
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>File Upload</title>
</head>
<body>
    <h1>File Upload in PHP</h1>
    <p style="color: green;"> <?php echo $success; ?> </p>
    <p style="color: red;"> <?php echo $error; ?> </p>
    <form method="POST" action="" enctype="multipart/form-data">
        <table>
            <tr>
                <td><label for="file">Choose File</label></td>
                <td><input type="file" id="file" name="file" required></td>
            </tr><tr>
                <td><label for="target_dir">Destination Folder</label></td>
                <td><input type="text" id="target_dir" name="target_dir" placeholder="Enter target
directory" required></td>
            </tr><tr>
                <td colspan="2" style="text-align: center;"> <input type="submit" value="Upload"></td>
            </tr>
        </table>
    </form>
</body>
</html>
```
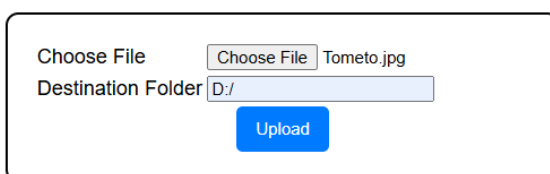
Output:

File Upload in PHP

File Upload in PHP

File uploaded successfully to: D:/Tometo.jpg

Choose File   [Choose File] Tometo.jpg
Destination Folder [D:/]
              [Upload]

5. Develop functionality to manage uploaded files:

    a. List uploaded files with options for viewing, downloading, or deleting them

Code:

```php
<?php
$directory = "D:/";
$success = "";
$error = "";
if (isset($_GET['delete'])) {
    $fileToDelete = $directory . $_GET['delete'];
    if (file_exists($fileToDelete) && is_file($fileToDelete)) {
        if (unlink($fileToDelete)) {
            $success = "File deleted successfully.";
        } else {
            $error = "Error deleting file.";
        }
    } else {
        $error = "File does not exist.";
    }
}
$files = [];
if (file_exists($directory) && is_dir($directory)) {
    $scanFiles = scandir($directory);
    foreach ($scanFiles as $file) {
        if (is_file($directory . $file)) {
            $files[] = $file;
        } }
} else {
    $error = "Directory does not exist.";
}
if (isset($_GET['download'])) {
    $fileToDownload = $directory . $_GET['download'];
    if (file_exists($fileToDownload) && is_file($fileToDownload)) {
        header('Content-Type: application/octet-stream');
        header("Content-Transfer-Encoding: utf-8");
        header("Content-Disposition: attachment; filename=\"" . $_GET['download'] . "\"");
        readfile($fileToDownload);
        exit;
    } else {
        $error = "File does not exist.";
    }
}
```

```php
if (isset($_GET['view'])) {
   $fileToView = $directory . $_GET['view'];
   if (file_exists($fileToView) && is_file($fileToView)) {
      $mimeType = mime_content_type($fileToView);
      header("Content-Type: $mimeType");
      readfile($fileToView);
      exit;
   } else {
      $error = "File does not exist.";
   }
}
?>
<!DOCTYPE html>
<html lang="en">
<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-scale=1.0">
   <title>File Manager</title>
</head>
<body>
   <h1>File Manager (D: Drive)</h1>
   <p style="color: green;"><?php echo $success; ?></p>
   <p style="color: red;"><?php echo $error; ?></p>
   <table>
     <tr>
        <th>File Name</th>
        <th>Actions</th>
     </tr>
     <?php if (!empty($files)) : ?>
        <?php foreach ($files as $file) : ?>
          <tr>
             <td><?php echo $file; ?></td>
             <td>
    <a href="?view=<?php echo urlencode($file); ?>" target="_blank" class="btn">View</a>
        <a href="?download=<?php echo urlencode($file); ?>" class="btn">Download</a>
   <a href="?delete=<?php echo urlencode($file); ?>" class="btn delete-btn" onclick="return
               confirm('Are you sure you want to delete this file?');">Delete</a>
             </td>
          </tr>
        <?php endforeach; ?>
     <?php else : ?>
```

```
        <tr>
            <td colspan="3">No files found in the directory.</td>
        </tr>
        <?php endif; ?>
    </table>
</body>
</html>
```

Output:

File Manager (D: Drive)

File Name	Actions
FiberLaserManagement V2.0.10(1).msi	View Download Delete
PRASHANT_SHERE_RESUME_2020doc.doc	View Download Delete
PRASHANT_SHERE_RESUME_2020doc.pdf	View Download Delete
Tometo.jpg	View Download Delete
restaurants.json	View Download Delete
tvshows.json	View Download Delete