Batch: A1	Roll No.: 16010123012
Experiment No. 07	

TITLE: Demonstrate the Super Global Variables and File Uploading in PHP

AIM: To understand various file operations and file upload in PHP
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Expected Outcome of Experiment: Process external files in PHP.
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Books/ Journals/ Websites referred:
Steve Prettyman,"Learn PHP 8 Using MySQL, JavaScript, CSS3, and HTML5", Apress 2nd / 2020 edition.

_____

PHP Basic Concepts Learned With Syntax:
fopen("example.txt", "r");
fread($file, filesize("example.txt"));
fopen("example.txt", "w");
fwrite($file, "New text");
fopen("example.txt", "a");
unlink("example.txt");
header('Content-Disposition: attachment; filename="example.txt"');
readfile("example.txt");

Description of the program implemented with output:
It asks the user to upload files of specific types (JPG, PNG, TXT, PDF, DOCX), and upon submission, it displays "File uploaded successfully."

Code:
```php
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST" &&
isset($_FILES["fileToUpload"])) {
  $targetDir = "uploads/";
  $targetFile = $targetDir . basename($_FILES["fileToUpload"]["name"]);
  $uploadOk = 1;
  $fileType = strtolower(pathinfo($targetFile, PATHINFO_EXTENSION));

  if (file_exists($targetFile)) {
    echo "File already exists.";
    $uploadOk = 0;
  }
```
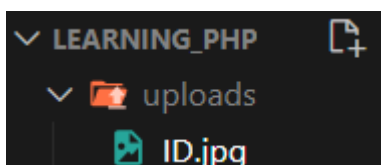
```php
$allowedTypes = array("jpg", "png", "txt", "pdf", "docx");
if (!in_array($fileType, $allowedTypes)) {
    echo "Only JPG, PNG, TXT, PDF, DOCX files are allowed.";
    $uploadOk = 0;
}

if ($uploadOk == 1) {
    if (move_uploaded_file($_FILES["fileToUpload"]["tmp_name"],
$targetFile)) {
        echo "File uploaded successfully: " .
htmlspecialchars(basename($_FILES["fileToUpload"]["name"]));
    } else {
        echo "Error uploading file.";
    }
}
}
?>

<!DOCTYPE html>
<html>
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
  <title>File Upload & Operations</title>
  <style>
    * {
      margin: 10px;
      font-family: Georgia, "Times New Roman", Times, serif;
      font-size: 24px;
    }
  </style>
</head>

<body>
  <h2>Upload File</h2>
  <form action="" method="post" enctype="multipart/form-data"><br>
    <input type="file" name="fileToUpload"><br>
    <input type="submit" value="Upload File">
  </form>
</body>
</html>
```
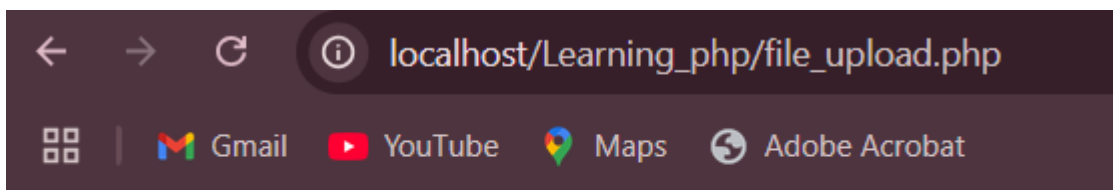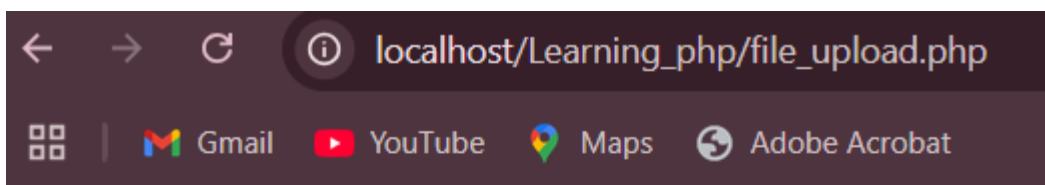
```
∨ LEARNING_PHP        ☐₊
  ∨ 📁 uploads
      🖻 ID.jpg
```

Conclusion:

I successfully implemented and understood the use of superglobal variables in PHP, such as $_FILES, $_POST, and $_GET, to handle file uploads and various file operations. Additionally, I learned the importance of secure file handling and validation to prevent unauthorized file uploads.

Post Lab Questions:

Perform following file operations with respect to problem Program:

Open, read and write with various modes, append, delete and downloading file.

Answer: Code with output screenshots

```php
<?php
$targetDir = "uploads/";

if ($_SERVER["REQUEST_METHOD"] == "POST" &&
isset($_FILES["fileToUpload"])) {
  $fileName = basename($_FILES["fileToUpload"]["name"]);
  $targetFile = $targetDir . $fileName;
  $fileType = strtolower(pathinfo($targetFile, PATHINFO_EXTENSION));

  $allowedTypes = array("jpg", "png", "txt", "pdf", "docx");
  if (in_array($fileType, $allowedTypes)) {
    if (move_uploaded_file($_FILES["fileToUpload"]["tmp_name"],
$targetFile)) {
      echo "File uploaded successfully: " . htmlspecialchars($fileName);
    } else {
      echo "Error uploading file.";
    }
  } else {
    echo "Invalid file type. Only JPG, PNG, TXT, PDF, and DOCX files are
allowed.";
  }
}

if (isset($_POST['readFile'])) {
  $file = $targetDir . $_POST['readFile'];
  if (file_exists($file)) {
    echo "<h3>File Contents:</h3><pre>" .
htmlspecialchars(file_get_contents($file)) . "</pre>";
  } else {
    echo "File does not exist.";
  }
}

if (isset($_POST['writeFile']) && isset($_POST['writeText'])) {
  $file = $targetDir . $_POST['writeFile'];
  file_put_contents($file, $_POST['writeText']);
  echo "File written successfully.";
}

if (isset($_POST['appendFile']) && isset($_POST['appendText'])) {
  $file = $targetDir . $_POST['appendFile'];
  file_put_contents($file, $_POST['appendText'] . PHP_EOL, FILE_APPEND);
  echo "Text appended successfully.";
}

if (isset($_POST['deleteFile'])) {
  $file = $targetDir . $_POST['deleteFile'];
  if (file_exists($file)) {
```

```php
    unlink($file);
    echo "File deleted successfully.";
  } else {
    echo "File not found.";
  }
}

if (isset($_POST['downloadFile'])) {
  $file = $targetDir . $_POST['downloadFile'];
  if (file_exists($file)) {
    header("Content-Disposition: attachment; filename=" .
basename($file));
    header("Content-Type: application/octet-stream");
    readfile($file);
    exit;
  } else {
    echo "File not found.";
  }
}
?>

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0"
/>
  <title>File Upload & Operations</title>
  <style>
    * {
      margin: 10px;
      text-align: center;
      font-family: Georgia, "Times New Roman", Times, serif;
      font-size: 20px;
    }
  </style>
</head>

<body>
  <h2>Upload a File</h2>
  <form action="" method="post" enctype="multipart/form-data"><br>
    <input type="file" name="fileToUpload" required><br>
    <input type="submit" value="Upload File">
  </form>

  <h2>File Operations</h2>

  <form method="post">
```

```html
    <input type="text" name="readFile" placeholder="Enter file name"><br>
    <input type="submit" value="Read File"><br>
  </form>

  <form method="post">
    <input type="text" name="writeFile" placeholder="Enter file
name"><br>
    <textarea name="writeText" placeholder="Enter text to
write"></textarea><br>
    <input type="submit" value="Write to File">
  </form>

  <form method="post">
    <input type="text" name="appendFile" placeholder="Enter file
name"><br>
    <textarea name="appendText" placeholder="Enter text to
append"></textarea><br>
    <input type="submit" value="Append to File">
  </form>

  <form method="post">
    <input type="text" name="deleteFile" placeholder="Enter file
name"><br>
    <input type="submit" value="Delete File"><br>
  </form>

  <form method="post">
    <input type="text" name="downloadFile" placeholder="Enter file
name"><br>
    <input type="submit" value="Download File"><br>
  </form>
</body>
</html>
```

File uploaded successfully: wpl.txt

Upload a File

Choose File No file chosen

Upload File

File Contents:

Hello World!

File written successfully.

Upload a File

File Contents:

Hello PHP

Text appended successfully.

Upload a File

File Contents:

Hello PHPHello React

File deleted successfully.

Upload a File