CO-4	Apply the concept of state management for building web application.

PRACTICAL LIST – 4

4.1 Write two different PHP script to demonstrate passing variables through a URL.

4.2 Write a PHP script to demonstrate creating, deleting, updating, retrieving and passing variable cookie data.

4.3 Write a PHP script to authentication with cookies.

4.4 Write two different PHP script to demonstrate passing variables with sessions.

4.5 Write a PHP script to authentication with sessions.

4.6 Write a program to keep track of how many times a visitor has loaded the page.

4.7 Write a PHP script to demonstrate Error Handling Using die()

4.8 Write a PHP script to demonstrate Use Of Custom Error Handler.

4.9 Write a PHP script to demonstrate Use Of Try and Catch Error Handling.

Aim:

4.1   Write two different PHP script to demonstrate passing variables through a URL.

Software Required: Notepad, WordPad, Notepad++, Dreamweaver

Pre-requisite: Basic knowledge of editor

Theory/Logic:

❖ **Passing variable through URL:**

❑ When GET method is used to submit forms data to server. Data is appended to the end of theURL as follows:

❑ http://localhost/myscript.php?firstName=Fred & lastName=Bishop & ...

❑ Browser adds a query (?) character to the end of the URL, then follows it with each of theform fields as "name=value" pairs, with each pair separated by an ampersand (&).

❑ The *query string is the part of the URL after the ? Character.*

❑ Query string is simply a string of characters stored in a URL, you can manually create a URLcontaining a query string in your PHP script, then include the URL as a link.

Program/Solution:

PR4.1(1): -

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Practitcsl-4.1</title>
    <style>
        .center {
            text-align: center;
            font-weight: bold;
            font-size: x-large;
            margin-top: 20px;
        }
    </style>
</head>
<body>
    <form action="PR4_1(2).php" method="GET">
        <div class="center">
            <p>Calculator</p>
            <label>First Number :</label>
            <input type="number" name="fnum" /><br>
            <label>Second Number :</label>
            <input type="number" name="snum" /><br>
        </div>
```

```html
        <button name="btnsum" style="margin-left: 45%; margin-top: 20px; font-
weight: bold;">+</button>
        <button name="btnsub" style="font-weight: bold;">-</button>
        <button name="btnmul" style="font-weight: bold;">*</button>
        <button name="btndiv" style="font-weight: bold;">/</button>
        <button name="btnmod" style="font-weight: bold;">%</button>
    </form>
</body>
</html>
```
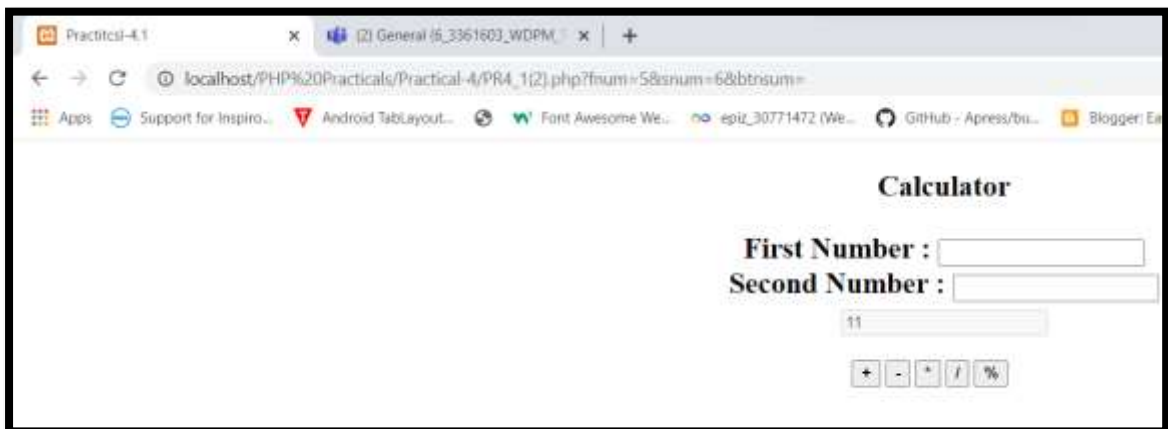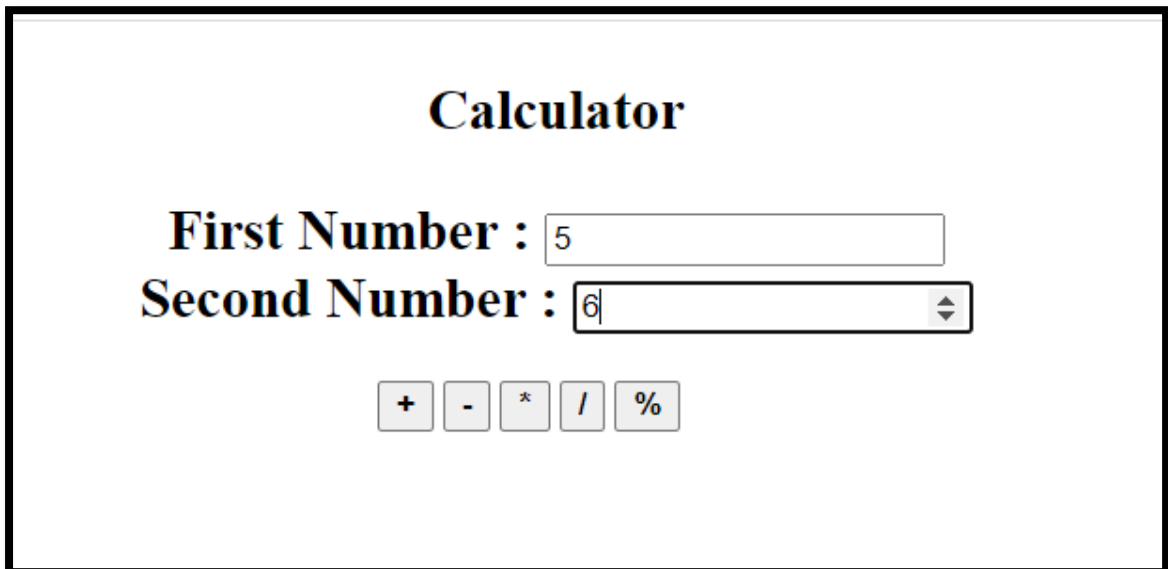
PR4.1(2): -

```php
<?php
    if(isset($_GET['btnsum']))
        $total=$_GET['fnum']+$_GET['snum'];
    else if(isset($_GET['btnsub']))
        $total=$_GET['fnum']-$_GET['snum'];
    else if(isset($_GET['btnmul']))
        $total=$_GET['fnum']*$_GET['snum'];
    else if(isset($_GET['btndiv']))
        $total=$_GET['fnum']/$_GET['snum'];
    else
        $total=$_GET['fnum']%$_GET['snum'];
?>


<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Practitcsl-4.1</title>
    <style>
        .center {
            text-align: center;
            font-weight: bold;
            font-size: x-large;
            margin-top: 20px;
        }
    </style>
</head>
<body>
    <form action="PR4_1(2).php" method="GET">
        <div class="center">
            <p>Calculator</p>
            <label>First Number :</label>
            <input type="number" name="fnum" /><br>
            <label>Second Number :</label>
            <input type="number" name="snum" /><br>
            <input type="number" value="<?php echo $total; ?>" disabled /><br>
        </div>
        <button name="btnsum" style="margin-left: 45%; margin-top: 20px; font-
weight: bold;">+</button>
        <button name="btnsub" style="font-weight: bold;">-</button>
        <button name="btnmul" style="font-weight: bold;">*</button>
        <button name="btndiv" style="font-weight: bold;">/</button>
        <button name="btnmod" style="font-weight: bold;">%</button>
    </form>
```

```
</body>
</html>
```

Output:

Questions:

1. Define: QueryString.

   _____

   _____

   _____

   _____

2. List out Disadvantages of QueryString.

   _____

   _____

   _____

   _____

   _____

Aim:

4.2   Write a PHP script to demonstrate creating, deleting, updating, retrieving

and passingvariable cookie data.

4.3   Write a PHP script to authentication with cookies.

Software Required: Notepad, WordPad, Notepad++, Dreamweaver

Pre-requisite: Basic knowledge of editor

Theory/Logic:
❖ **Cookies:**
❑ It is a small piece of information stored either on client's computer's browser memory or in afile on hard disk.
❑ It is having name and value.
❑ It is useful for storing user specific information such as username, age, password, last visit ofuser etc.
❑ Syntax: -
Setcookie (Name, value, Expire Time, path, domain, security, HttpOnly)
❖ **Accessing Cookies:**
❑ Syntax: -
$_COOKIE ['cookie name']
❖ **Deleting Cookie:**
☐ To delete a cookie, call setcookie () with the cookie name and any value (such as an emptystring), and set an expires argument that is in the past.
❑ Syntax: -
Setcookie ('Cookie Name',"")
        /OR/
Setcookie ("name","", time ()-60,"/")
❖ **Session Cookie:**
❑ When user creates a cookie using setcookie () function without specifying any Expire Timethan it is treated as session cookie.
❑ **Syntax:**
Setcookie ('cookie

Name', value);

Program/Solution:

PR4.2(1): -

```html
<html>
    <head>
        <title>Php Practical</title>
        <style>
            .center {
                text-align: center;
                margin-top: 15%;
```

```
                font-size: large;
                font-family: Verdana, Geneva, Tahoma, sans-serif;
            }
        </style>
    </head>
    <body>
        <form action="" method="post">
            <div class="center">
                <label for="opt">Choose any one operation:</label>
                <select name="opt" id="opt">
                    <option value="create">Create</option>
                    <option value="delete">Delete</option>
                    <option value="update">Update</option>
                    <option value="retrieve">Retrieve</option>
                </select><br>
                <button type="submit" name="btn" style="margin-top: 30px;font-
size: large;"><b>Submit</b></button>
            </div>
        </form>
    </body>
</html>
<?php
    if(isset($_REQUEST['btn']))
    {
        $val=$_REQUEST['opt'];
        if($val=="create")
        {
            //setcookie(name, value, expire);
            setcookie('name', 'Abhi', time()+60*60*3);
            setcookie('age', '18', time()+60*60*3);
            echo "Abhi cookie has been set<br>";
            echo "The cookie has been set for 3 days";
        }
        if($val=="delete")
        {
            if(isset($_COOKIE['name']) and isset($_COOKIE['age']))
            {
                setcookie('name', 'Abhi', time()-60*60*3);
                setcookie('age', '18', time()-60*60*3);
                if(isset($_COOKIE['name']) and isset($_COOKIE['age']))
                {
                    echo "Cookies has been deleted";
                }
                else
                {
                    echo "Cookies has been not deleted";
                }
            }
            else
            {
                echo "Cookies has been not set yet";
            }
        }
        if($val=="update")
        {
            header("location: update_cookie.php");
```

```php
        }
        if($val=="retrieve")
        {
            header("location: view_cookie.php");
        }
    }

?>
```

Update_cookie.php:

```php
<?php
    if(isset($_COOKIE['name']) and isset($_COOKIE['age']))
    {
        $name=$_COOKIE['name'];
        $age=$_COOKIE['age'];
        ?>
        <form action="" method="post">
            Name: <input type="text" name="txtname" placeholder="<?php echo
$name; ?>"><br>
            Age: <input type="text" name="txtage" placeholder="<?php echo
$age; ?>"><br>
            <button type="submit" name="btnsubmit">Submit</button>
        </form>
    <?php
    }
    else
    {
        echo "<script>
            alert('Cookies are not set yet');
            window.location.href='cookies.php';
        </script>";
    }
?>
<?php
    if(isset($_REQUEST['btnsubmit']))
    {
        $name=$_REQUEST['txtname'];
        $age=$_REQUEST['txtage'];
        setcookie('name', $name, time()+60*60*3);
        setcookie('age', $age, time()+60*60*3);
        if(isset($_COOKIE['name']) and isset($_COOKIE['age']))
        {
            echo "<script>
            alert('Cookies has been updated');
            window.location.href='cookies.php';
            </script>";
        }
    }
?>
```

View_cookie.php: -

```php
<?php
    if(isset($_COOKIE['name']) and isset($_COOKIE['age']))
    {
        $name = $_COOKIE['name'];
        $age = $_COOKIE['age'];
```

```php
        echo "Name : $name";
        echo "<br>Age : $age";
    }
    else
    {
        echo "<script>
            alert('No cookie is available');
            window.location.href='cookies.php';
            </script>";
    }
?>
```

PR4.3:-

```php
<html>
<head>
    <title>Login</title>
</head>
<body>
    <form action="" method="POST">
            <label>Username :</label>
            <input type="text" name="txtname"><br>
            <label>Password :</label>
            <input type="password" name="txtpassword"><br>
            <button name="btnlogin">Login</button>
    </form>
</body>
</html>
<?php
    if(isset($_REQUEST['btnlogin']))
    {
        $post_username=$_POST['txtname'];
        $post_password=$_POST['txtpassword'];
        if($post_username=="abhinalla" and $post_password=="abhi")
        {
            setcookie('username', $post_username);
            setcookie('password', $post_password);
            header("location: seeookie.php");
        }
        else {
            echo "Error";
        }
    }
?>
```

PR4.3(2):-

```php
<?php
    if(isset($_COOKIE['username']) and isset($_COOKIE['password']))
    {
        $name=$_COOKIE['username'];
        $pass=$_COOKIE['password'];?>
        <body>
            <form action="" method="post">
                Welcome, <?php echo $name; ?><br>
                <button type="submit" name="logout">Logout</button>
            </form>
        </body>
        <?php
```

```php
    if(isset($_REQUEST['logout']))
    {
        setcookie('username', $name, time()-60*60*3);
        setcookie('password', $pass, time()-60*60*3);
        echo "<script>
        alert('Logging Off');
        window.location.href='PR4_3.php';
        </script>";
    }
?>
    <?php
    }
    else
    {
        echo "<script>
        alert('User's cookie has not been set');
        window.location.href='PR4_3.php';
        </script>";
    }
?>
```
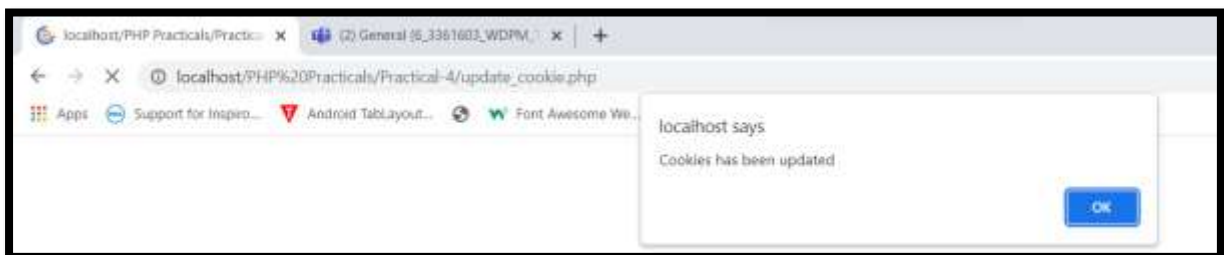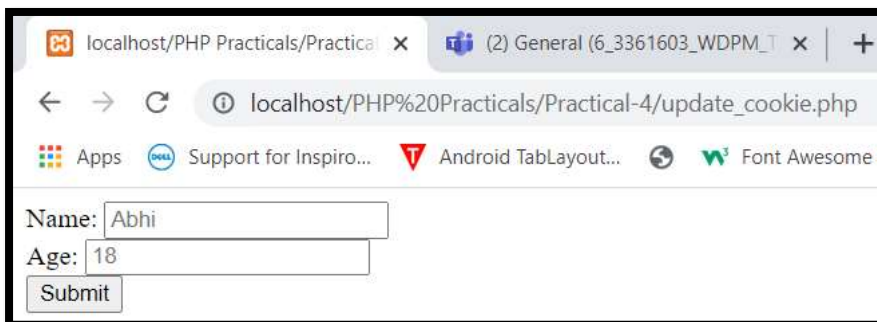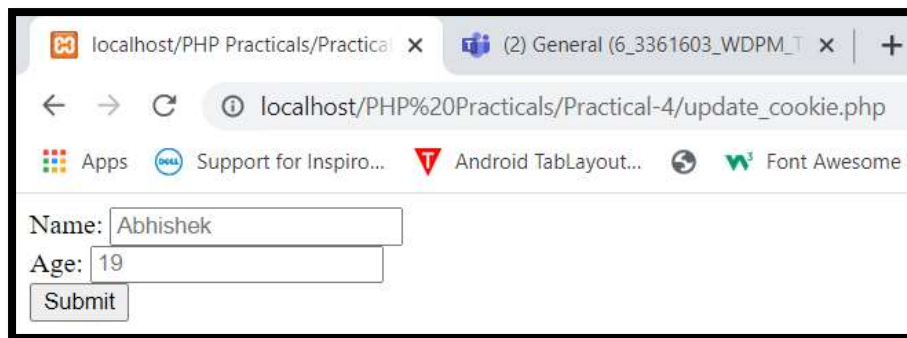
Output:

<div align="center">

PR4.2

</div>

Creating cookie: -

Updating a cookie: -

After updating the cookie: -

Retrieving the cookie: -

Deleting the cookie: -

After deleting, retrieving the cookie: -
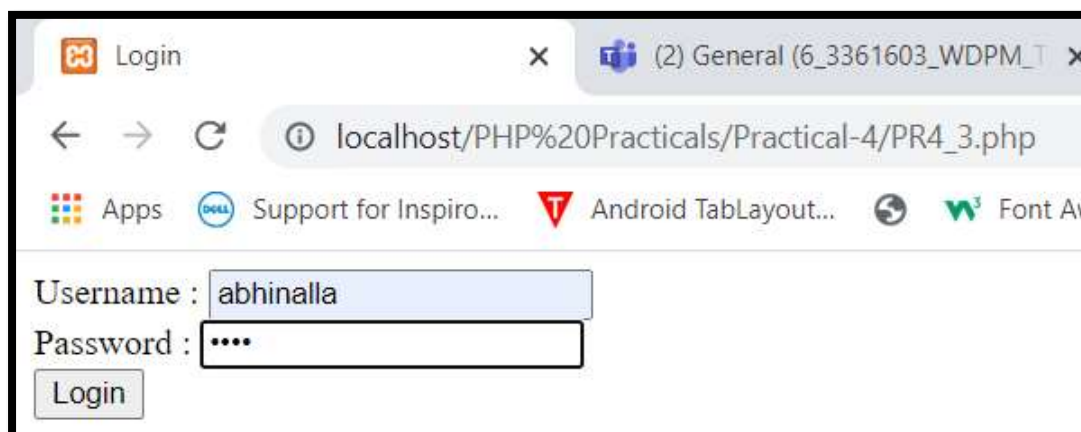
PR4.3

Authenticating the user: -
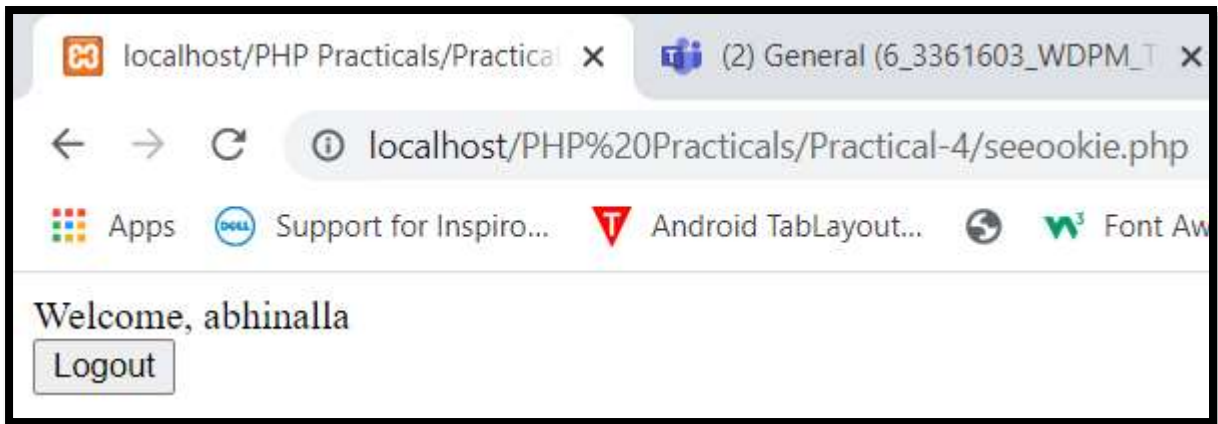
Questions:

1. Write a code for cookie which expires after 3 days.

   _____

   _____

   _____

   _____

   _____

   _____

   _____

Aim:

4.4   Write two different PHP script to demonstrate passing variables with sessions.

4.5   Write a PHP script to authentication with sessions.

4.6   Write a program to keep track of how many times a visitor has loaded the page.

Software Required: Notepad, WordPad, Notepad++, Dreamweaver

Pre-requisite: Basic knowledge of editor

Theory/Logic:
❖ **Session:**
❑ It is a temporary data that is created and stored at server side to uniquely identify each useron website.
❑ A session is a way to store information (in variables) to be used across multiple pages.
❑ PHP first creates a unique identifier for that particular session which is a random string of 32hexadecimal numbers such as 3c7foj34c3jj973hjkop2fc937e3443.
❑ To start a PHP session in your script simply calls session_ start ().
❑ Session variables are set with the PHP global variable: **$_SESSION.**
❖ **Accessing Session: -**
❑ Syntax: -
   $_SESSION ['Variable name'] =value.
❖ **Destroy Session:**
❑ There are three methods to destroy session.
❑ session_unset()
❑ session_destroy()
❑ unset($_SESSION['Session Name']);
Program/Solution:
PR4.4

```php
<?php
    session_start();
?>
<html>
    <head>
        <title>Practical-4</title>
        <style>
            .center{
                text-align: center;
                font-size: large;
                font-family: Verdana, Geneva, Tahoma, sans-serif;
                margin-top: 15%;
            }
        </style>
    </head>
    <body>
        <div class="center">
```

```php
        <form action="" method="POST">
            Name of Game: <input type="text" name="txtname" /><br>
            <button name="btn" type="submit" style="margin-top:
30px;"><b>Submit</b></button>
        </form>
        </div>
    </body>
</html>
<?php
    if(isset($_REQUEST['btn']))
    {
        $name=$_REQUEST['txtname'];
        $_SESSION['game_name']=$name;
        header("location: PR4_4(2).php");
    }
?>
```

PR4.4(2): -

```php
<?php
    session_start();
    if(isset($_SESSION['game_name']))
    {
        echo "Session Name : ".$_SESSION['game_name'];
    }
    else
    {
        session_destroy();
        header("location: PR4_4.php");
    }
?>
```

PR4.5: -

```php
<?php
    session_start();
?>
<html>
<head>
    <title>Login</title>
</head>
<body>
    <form action="" method="POST">
            <label>Username :</label>
            <input type="text" name="txtname"><br>
            <label>Password :</label>
            <input type="password" name="txtpassword"><br>
            <button name="btnlogin">Login</button>
    </form>
</body>
</html>
<?php
    if(isset($_REQUEST['btnlogin']))
    {
        $name=$_REQUEST['txtname'];
        $pass=$_REQUEST['txtpassword'];
        if($name=="abhinalla" and $pass=="abhi")
        {
            $_SESSION['username']=$name;
            header("location: PR4_5(2).php");
```

```php
        }
        else
        {
            echo '<script>alert("Enter Credentails are not right.<br>Reenter
the details.")</script>';
        }
    }
?>
```

PR4.5(2): -

```php
<?php
    session_start();
    if(isset($_SESSION['username']))
    {
?>
<html>
<head>
    <title>Practical-5</title>
</head>
<body>
    <form action="" method="post">
        <?php
            echo "Welcome ". $_SESSION['username']."<br>Thanks for visiting
the website.";
        ?>
        <br><button type="submit" name="logout">Logout</button>
    </form>
</body>
</html>
<?php
}
else
{
    session_destroy();
    header("location: PR4_5.php");
}
?>
<?php
    if(isset($_REQUEST['logout']))
    {
        session_destroy();
        header("location: PR4_5.php");
    }
?>
```

PR4.6: -

```php
<?php

session_start();

if(isset($_SESSION['views']))
    $_SESSION['views'] = $_SESSION['views']+1;
else
    $_SESSION['views']=1;

echo"Views = ".$_SESSION['views'];
?>
<body>
```
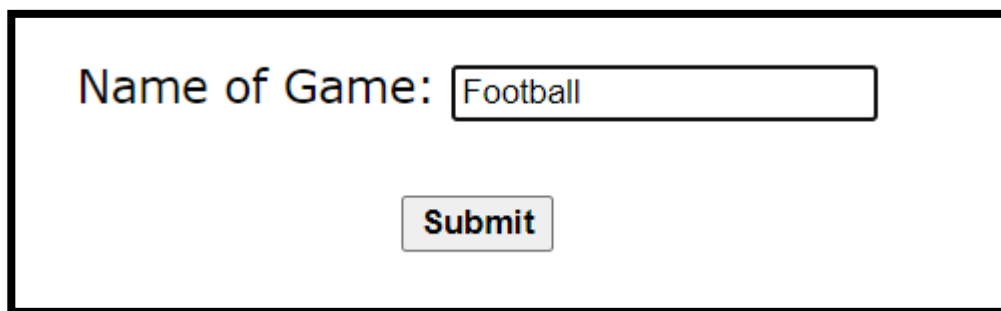
```
    <br>For resetting the Views, <a href="reset_views.php">Click Here</a>
  </body>
```

Reset_views: -

```php
<?php

  session_start();
  $views = $_SESSION['views'];

  unset($_SESSION['views']);
  session_destroy();
   echo "Views has been resetted";
  ?>
  <br>For Viewing the visits, <a href="PR4_6.php">Click Here</a>
```
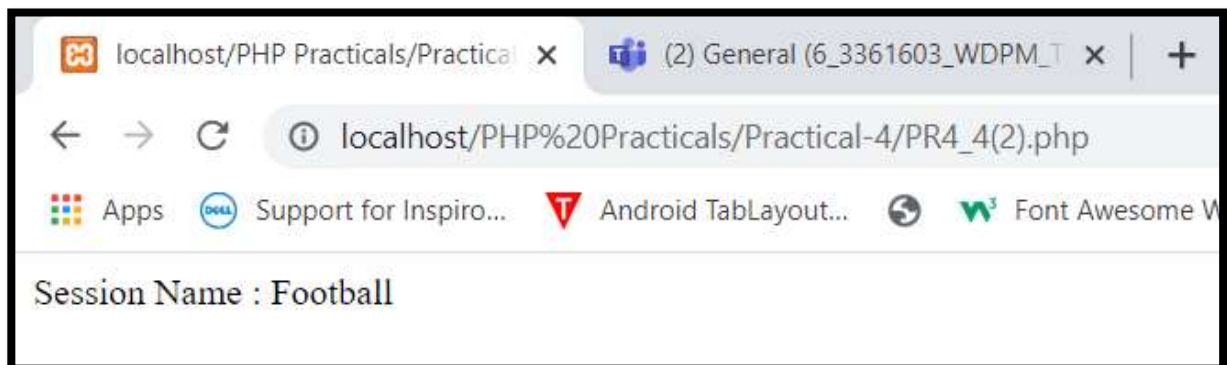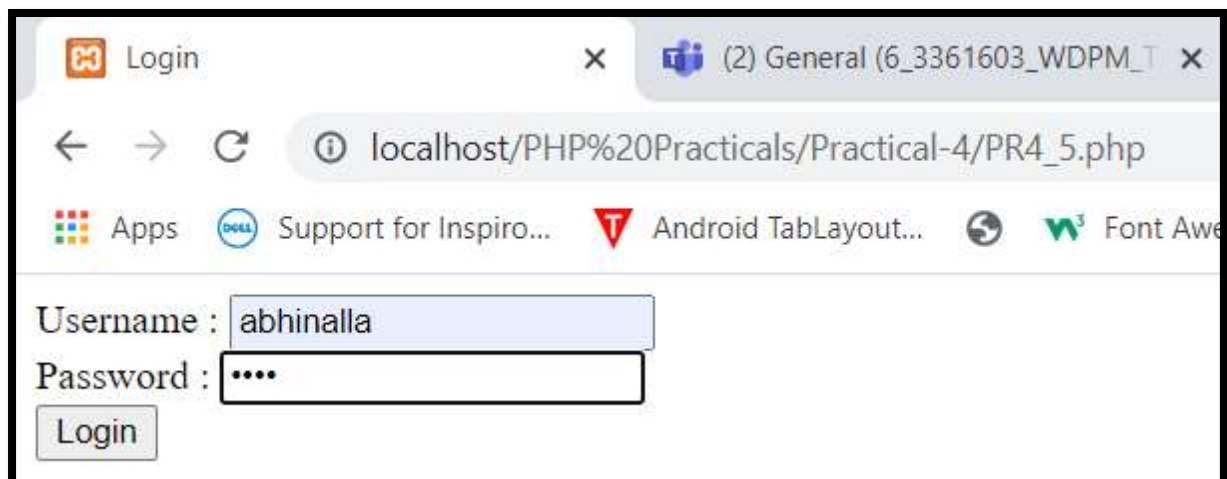
Output:

PR4.4

PR4.4(2)

PR4.5

After clicking Login button,
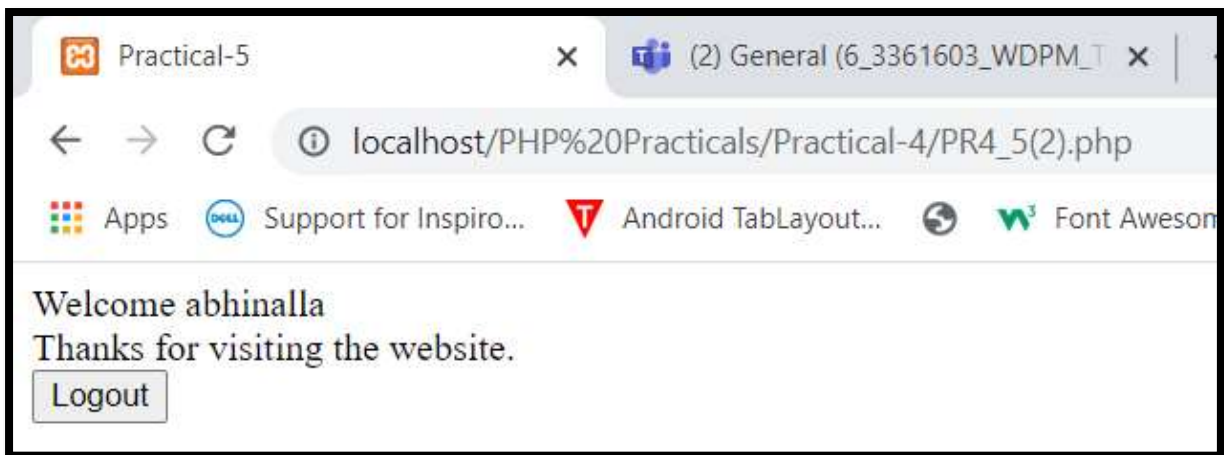
After clicking the logout button,
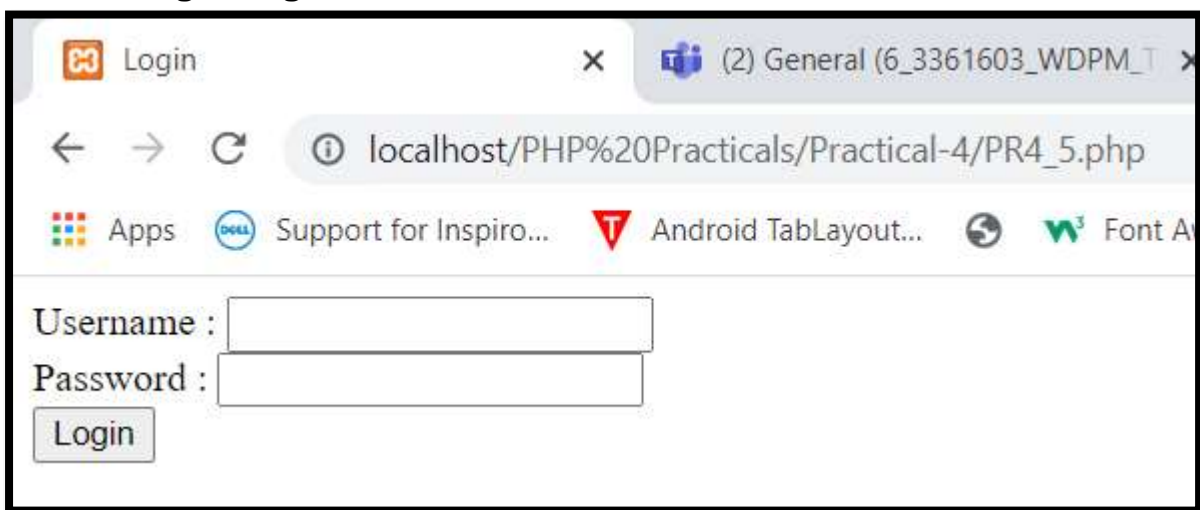
Questions:

1. How to create current Session ID?

_____

_____

_____

_____

_____

2. Write any two differences between Cookie V/S Session.

Aim:

4.7   Write a PHP script to demonstrate Error Handling Using die()

4.8   Write a PHP script to demonstrate Use of Custom Error Handler.

4.9   Write a PHP script to demonstrate Use of Try and Catch Error Handling.

Software Required: Notepad, WordPad, Notepad++, Dreamweaver

Pre-requisite: Basic knowledge of editor

Theory/Logic:

❖ **Error Handling in PHP:**

❑ When Error generated in script, in built Error handling mechanism of PHP stops execution ofscript and display error message.

❑ There are three methods of Error Handling in PHP.

❖ **Using die() function :-**

❑ It will display error message that user can easily understand and it will stops the execution ofscript.

❑ The die () function prints a message and exits the current script.

❑ This function is an alias of the exit () function.

❖ **Using Custom Error Handler:**

❑ We simply create a special function that can be called when an error occurs in PHP.

❑ Syntax: -

Function Custom_Function_Name (Type, Message, Filename, Line Number, Context)

☐ Type=It Indicates Type of error.

☐ Message=It Indicates Detailed Error Message.

☐ Filename=It Indicates Name of file in which Error Generated.

☐ Line Number=It Indicates Number of line in file which error generated.

☐ Context=It Indicates Array which contains all variables with its value.

❖ **Using Exception Handling:**

❑ PHP provides exception handling mechanism without terminating the execution withfollowing three keywords.

❑ 1)Try 2) catch   3) Throw.

❑ Syntax: -

Try
{//code to be executed
Throw new Exception ("Error Message");
}
Catch (ExceptionType1 $ob1)
{// Exception Handling code for Exception Type 1
}

Program/Solution:

PR4.7: -

```php
<?php
    if(!isset($a))
    {
```

```php
        die("Variable has not been set and not defined");
    }
    else
    {
        $c=$a;
        echo $c;
    }
?>
```

PR4.8: -

```php
<?php
    function MyCustom($Type, $Message, $FileName, $LineNumber)
    {
        echo "Error Type : ". $Type."<br/>";
        echo "Error Message : ". $Message."<br/>";
        echo "File Name : ". $FileName."<br/>";
        echo "Line Number : ". $LineNumber."<br/>";
    }
    set_error_handler("MyCustom");
    $n1=40;
    $n2=0;
    echo "Division : ".$n1/$n2."<br>";
    echo "Number 1 : ".$n1."<br>";
    echo "Number 2 : ".$n2."<br>";
?>
```

PR4.9: -

```php
<?php
try {
    $n1=40;
    $n2=0;
    if($n2==0)
    {
        throw new Exception("Divide By Zero Exception");
    }
    else
    {
        echo $n1/$n2;
    }
}
catch(Exception $e)
{
    echo $e->getMessage();
}
?>
```

Output:

PR4.7
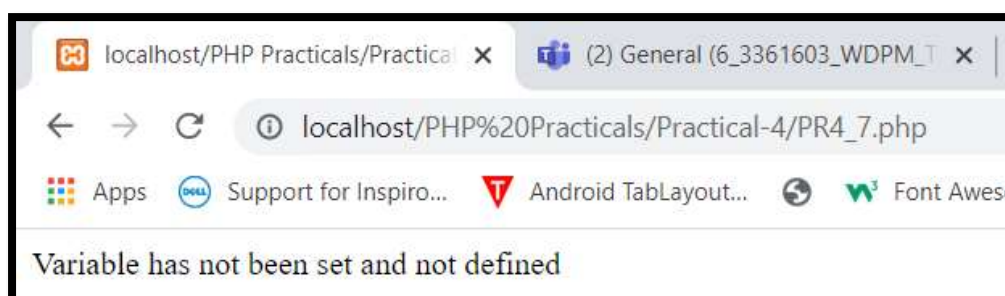
PR4.8

PR4.9
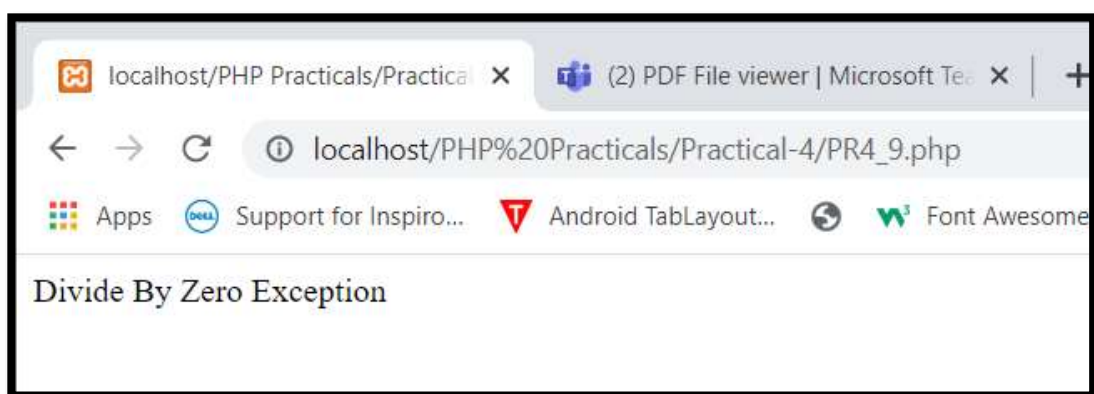
Questions:

1. Differentiate die Vs Custom Error Handler