Practical-7

OOP with PHP -1

Practical – 7 OOP with PHP-1

1. **Create a php page which takes the student's name and marks of three subjects from the user. Manage all information via session and display all information on the next page.**

   Code:

   index.php

```
<!DOCTYPE html>
<html>
<head>
    <title>Bank Account Operations</title>
</head>
<body>
    <h1>Bank Account Operations</h1>

    <form method="post" action="process.php">
        <label for="account_number">Account Number:</label>
        <input type="text" name="account_number"
     required><br><br>

        <label for="current_balance">Current Balance:</label>
        <input type="number" name="current_balance"
     required><br><br>

        <label for="amount">Amount:</label>
        <input type="number" name="amount" required><br><br>

        <input type="submit" name="deposit" value="Deposit">
        <input type="submit" name="withdraw"
     value="Withdraw">
    </form>
</body>
</html>
```

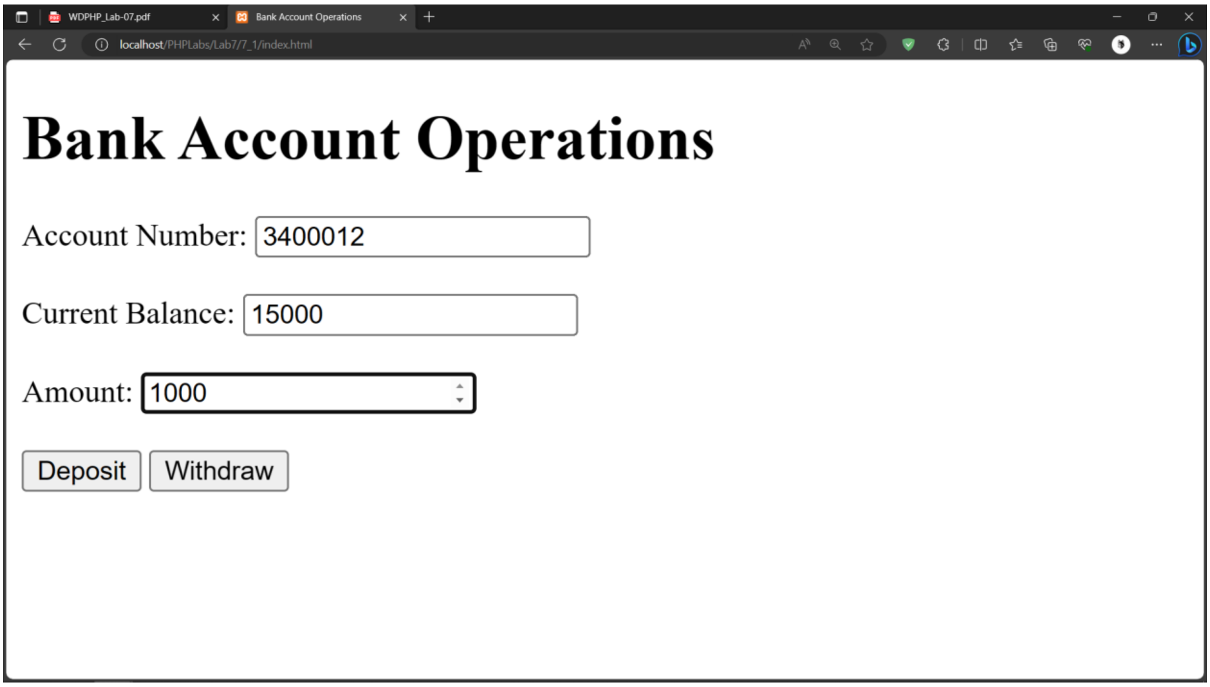
process.php

```
<?php
if ($_SERVER["REQUEST_METHOD"] == "POST") {
    $accountNumber = $_POST["account_number"];
    $currentBalance = $_POST["current_balance"];
    $amount = $_POST["amount"];

    include 'Bank.php';

    $bank = new Bank($accountNumber, $currentBalance);

    if (isset($_POST["deposit"])) {
        $bank->deposit($amount);
    } elseif (isset($_POST["withdraw"])) {
        $bank->withdraw($amount);
    }

    $accountInfo = $bank->getAccountInfo();
}
?>

<!DOCTYPE html>
<html>
<head>
    <title>Bank Account Operations Result</title>
</head>
<body>
    <h1>Bank Account Operations Result</h1>
    <?php
    if (isset($accountInfo)) {
        echo "<p>{$accountInfo}</p>";
    }

    ?>
    <a href="index.html">Go Back</a>
    <?php
     echo "<hr>Today is " . date("d/m/Y") . "<br>";
     echo "The time is " . date("h:i:sa");
    ?>
</body>
</html>
```

bank.php

```
<?php
class Bank {
    private $accountNumber;
    private $currentBalance;

    public function __construct($accountNumber,
     $currentBalance) {
        $this->accountNumber = $accountNumber;
        $this->currentBalance = $currentBalance;
    }

    public function deposit($amount) {
        if ($amount > 0) {
            $this->currentBalance += $amount;
        }
    }

    public function withdraw($amount) {
        if ($amount > 0 && $this->currentBalance >= $amount)
     {
            $this->currentBalance -= $amount;
        }
    }

    public function getAccountInfo() {
        return "Account Number: {$this-
     >accountNumber}<br>Current Balance: {$this-
     >currentBalance}";
    }
}
?>
```

Output:

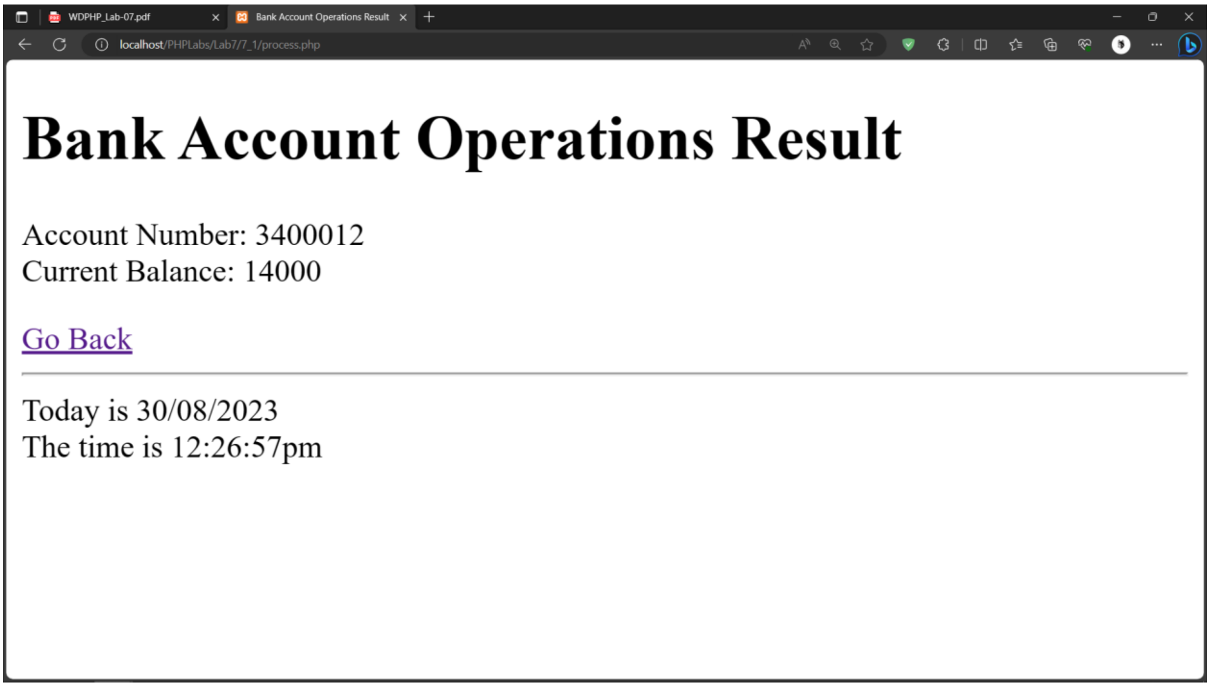


Bank Account Operations

Account Number: 3400012

Current Balance: 15000

Amount: 1000


WDPHP_Lab-07.pdf
Bank Account Operations Result
localhost/PHPLabs/Lab7/7_1/process.php

Bank Account Operations Result

Account Number: 3400012
Current Balance: 14000

Go Back

Today is 30/08/2023
The time is 12:26:57pm

2. Create a class Food. Having a property name, category and price. Create a constructor which assigns the values to the properties. Class should have a method order() which takes the quantity and calculates the total price. Display() will display all food details as well as total price of a food item. getTotalPrice() return the total price of each food item (price*qty) (*qty and total price are not class variables). Give all necessary input by the HTML form. And display output in HTML form. Take the necessary input of three food items from HTML form. [3 objects of a class should be created] . Create a php function which calculates the final sum of all the object's total price and display.
Code:

Index.html

```
<!DOCTYPE html>
<html>
<head>
    <title>Food Order Form</title>
</head>
<body>
    <h1>Food Order Form</h1>

    <form method="post" action="process.php">
        <h2>Food Item 1</h2>
        <label for="name1">Name:</label>
        <input type="text" name="name1" required><br>

        <label for="category1">Category:</label>
        <input type="text" name="category1" required><br>

        <label for="price1">Price:</label>
        <input type="number" name="price1" step="0.01"
required><br>


        <label for="quantity1">Quantity:</label>

        <input type="number" name="quantity1"
required><br><br>


        <h2>Food Item 2</h2>

        <label for="name2">Name:</label>

        <input type="text" name="name2" required><br>


        <label for="category2">Category:</label>

        <input type="text" name="category2" required><br>


        <label for="price2">Price:</label>

        <input type="number" name="price2" step="0.01"
required><br>


        <label for="quantity2">Quantity:</label>

        <input type="number" name="quantity2"
required><br><br>


        <h2>Food Item 3</h2>

        <label for="name3">Name:</label>

        <input type="text" name="name3" required><br>
        <label for="category3">Category:</label>

        <input type="text" name="category3" required><br>


        <label for="price3">Price:</label>

        <input type="number" name="price3" step="0.01"
required><br>


        <label for="quantity3">Quantity:</label>

        <input type="number" name="quantity3"
required><br><br>


        <input type="submit" value="Calculate Total">

    </form>

</body>

</html>
```

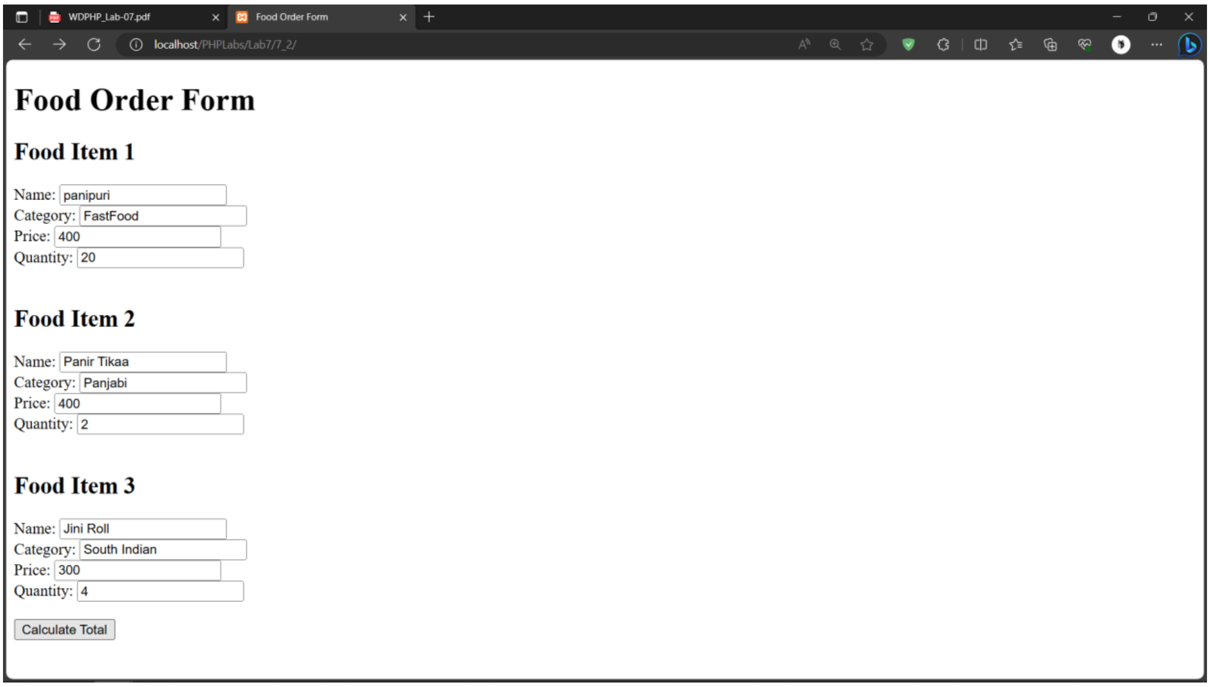
Food.php

```
<?php

class Food {

    private $name;

    private $category;

    private $price;


    public function __construct($name, $category, $price) {

        $this->name = $name;
        $this->category = $category;

        $this->price = $price;

    }


    public function order($quantity) {

        return $this->price * $quantity;

    }


    public function display() {

        echo "Name: {$this->name}<br>";

        echo "Category: {$this->category}<br>";

        echo "Price: {$this->price}<br>";

    }

}

?>
```

process.php

```
<?php

include 'Food.php';


$foodItems = array();

$totalSum = 0;


for ($i = 1; $i <= 3; $i++) {
    $name = $_POST["name$i"];
    $category = $_POST["category$i"];
    $price = $_POST["price$i"];
    $quantity = $_POST["quantity$i"];

    $food = new Food($name, $category, $price);
    $totalPrice = $food->order($quantity);

    $food->display();
    echo "Quantity: $quantity<br>";
    echo "Total Price: $totalPrice<br><br>";

    $totalSum += $totalPrice;
}


echo "Total Sum of All Items: $totalSum";

echo "<hr>Today is " . date("d/m/Y") . "<br>";
echo "The time is " . date("h:i:sa");

?>
```

Output:



Food Order Form

Food Item 1

Name: panipuri
Category: FastFood
Price: 400
Quantity: 20

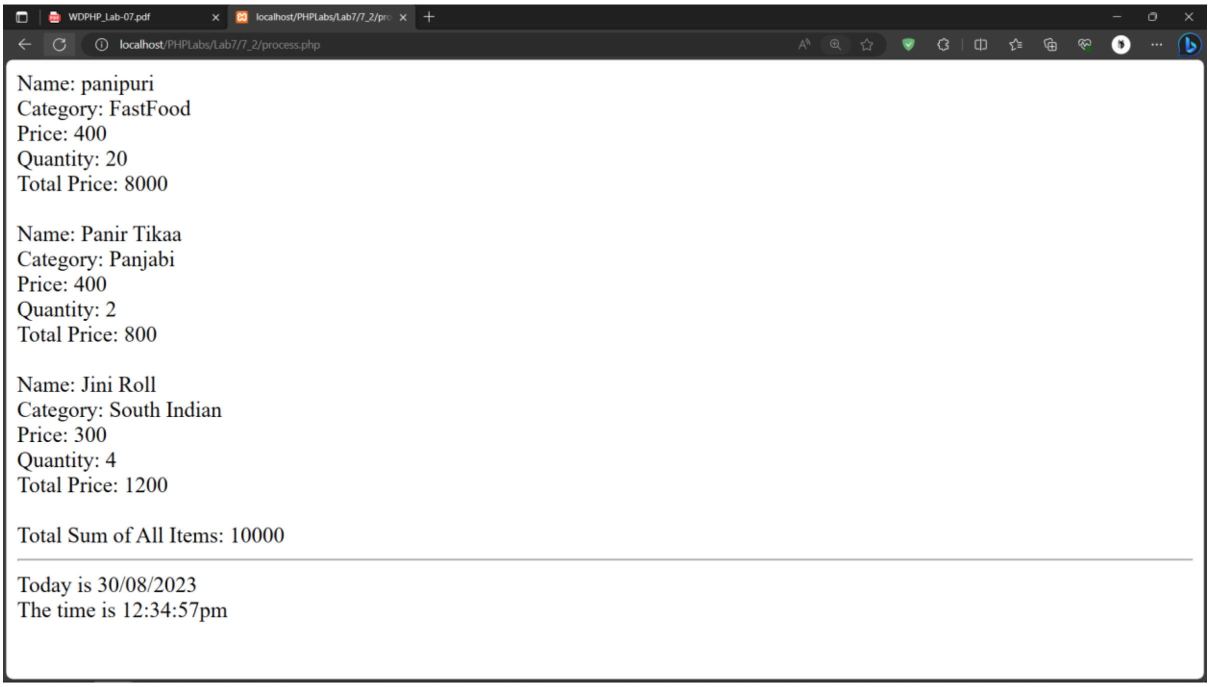
Food Item 2

Name: Panir Tikaa
Category: Panjabi
Price: 400
Quantity: 2

Food Item 3

Name: Jini Roll
Category: South Indian
Price: 300
Quantity: 4

Calculate Total


WDPHP_Lab-07.pdf
localhost/PHPLabs/Lab7/7_2/pro
localhost/PHPLabs/Lab7/7_2/process.php

```
Name: panipuri
Category: FastFood
Price: 400
Quantity: 20
Total Price: 8000

Name: Panir Tikaa
Category: Panjabi
Price: 400
Quantity: 2
Total Price: 800

Name: Jini Roll
Category: South Indian
Price: 300
Quantity: 4
Total Price: 1200

Total Sum of All Items: 10000
---------------------------------
Today is 30/08/2023
The time is 12:34:57pm
```

3. **Create a class course having properties coursename,noofyear. Create setter and getter public methods for each property. Create a student class which inherits the course class. Student class should have name, passout year, resultclass properties . Student class contain public method setvalue() which set all the properties value. And display() which display all the values. Create four different object of student class and display details of each object.**

Code:

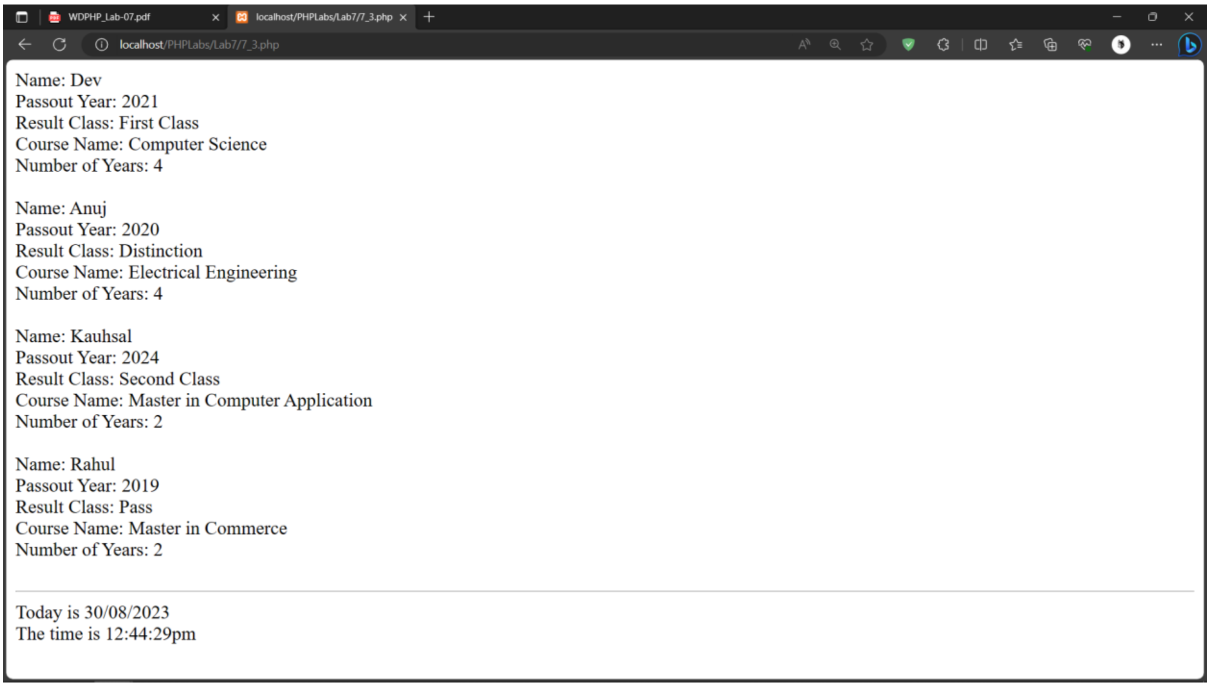
7_3.php

```
<?php
class Course {
    private $courseName;
    private $noOfYears;

    public function getCourseName() {
        return $this->courseName;
    }

    public function setCourseName($courseName) {
        $this->courseName = $courseName;
    }

    public function getNoOfYears() {
        return $this->noOfYears;
    }

    public function setNoOfYears($noOfYears) {
        $this->noOfYears = $noOfYears;
    }
}


class Student extends Course {
    private $name;
    private $passoutYear;
    private $resultClass;


    public function setValue($name, $passoutYear,
$resultClass) {
        $this->name = $name;
        $this->passoutYear = $passoutYear;
        $this->resultClass = $resultClass;
    }


    public function display() {
        echo "Name: " . $this->name . "<br>";
        echo "Passout Year: " . $this->passoutYear . "<br>";
        echo "Result Class: " . $this->resultClass . "<br>";
        echo "Course Name: " . $this->getCourseName() .
"<br>";
        echo "Number of Years: " . $this->getNoOfYears() .
"<br><br>";
    }
}
```

```
$student1 = new Student();
$student1->setCourseName("Computer Science");
$student1->setNoOfYears(4);
$student1->setValue("Dev", 2021, "First Class");

$student2 = new Student();
$student2->setCourseName("Electrical Engineering");
$student2->setNoOfYears(4);
$student2->setValue("Anuj", 2020, "Distinction");

$student3 = new Student();
$student3->setCourseName("Master in Computer Application");
$student3->setNoOfYears(2);
$student3->setValue("Kauhsal", 2024, "Second Class");

$student4 = new Student();
$student4->setCourseName("Master in Commerce");
$student4->setNoOfYears(2);
$student4->setValue("Eve", 2019, "Pass");


$student1->display();
$student2->display();
$student3->display();
```

```
$student4->display();


echo "<hr>Today is " . date("d/m/Y") . "<br>";

echo "The time is " . date("h:i:sa");

?>
```

Output:


WDPHP_Lab-07.pdf
localhost/PHPLabs/Lab7/7_3.php
localhost/PHPLabs/Lab7/7_3.php

```
Name: Dev
Passout Year: 2021
Result Class: First Class
Course Name: Computer Science
Number of Years: 4

Name: Anuj
Passout Year: 2020
Result Class: Distinction
Course Name: Electrical Engineering
Number of Years: 4

Name: Kauhsal
Passout Year: 2024
Result Class: Second Class
Course Name: Master in Computer Application
Number of Years: 2

Name: Rahul
Passout Year: 2019
Result Class: Pass
Course Name: Master in Commerce
Number of Years: 2

---------------------------------------------
Today is 30/08/2023
The time is 12:44:29pm
```

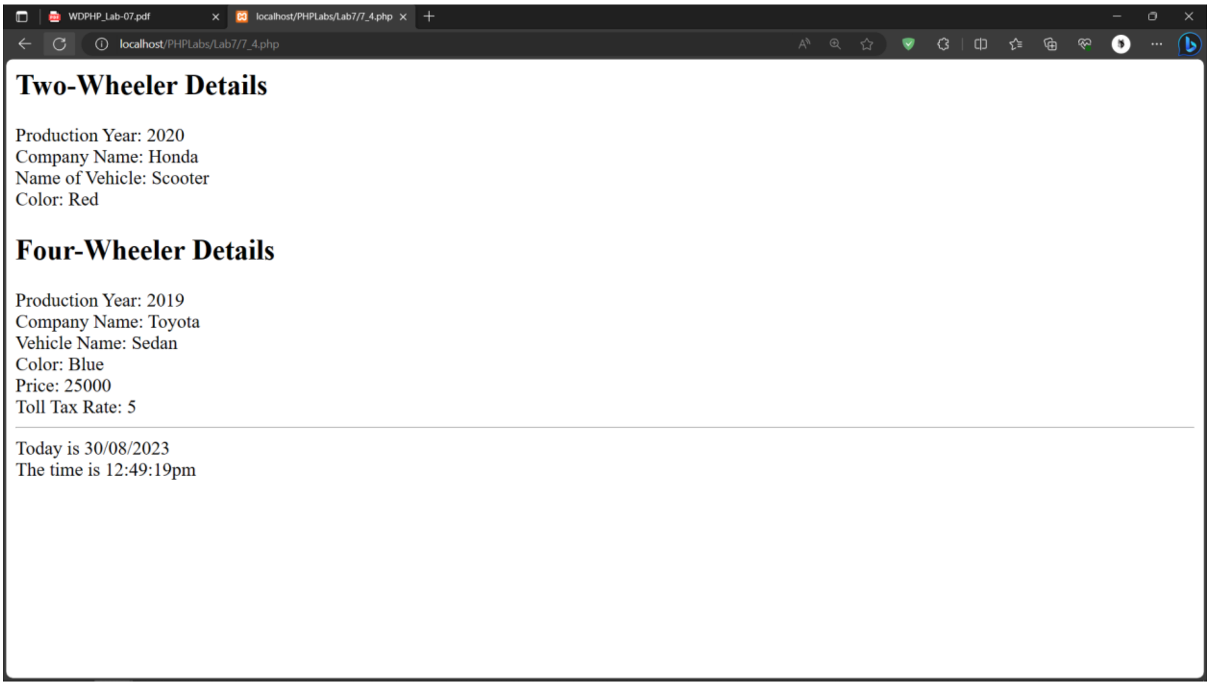
4 .Create a class vehicle having properties prodyear,company name and a protected method for setting and getting values. Create subclass TwoWheeler inherits from vehicle. Properties are nameofvehicle, color. It contains methods setvalues() and getvalues() which set the values of all properties and display it respectively. Create a subclass FourWheeler inherits from vehicle class. Properties are vehiclename, color, price, tolltaxrate . It contains constructor which set all the properties. Display() method for displaying the details. Create an object of TwoWheeler and FourWheeler and display all the details for both the objects.

Code:

7_4.php

```
<?php

class Vehicle {
    protected $prodYear;
    protected $companyName;

    public function setValues($prodYear, $companyName) {
        $this->prodYear = $prodYear;
        $this->companyName = $companyName;
    }

    public function getValues() {
        return "Production Year: {$this->prodYear}<br>Company
Name: {$this->companyName}";
    }
}

class TwoWheeler extends Vehicle {
    private $nameOfVehicle;
    private $color;

    public function setValues($prodYear, $companyName) {
        parent::setValues($prodYear, $companyName);
    }

    public function setAdditionalValues($nameOfVehicle,
$color) {
        $this->nameOfVehicle = $nameOfVehicle;
        $this->color = $color;
    }
    public function getValues() {
        $parentValues = parent::getValues();
        return "$parentValues<br>Name of Vehicle: {$this-
>nameOfVehicle}<br>Color: {$this->color}";
    }
}

class FourWheeler extends Vehicle {
    private $vehicleName;
    private $color;
    private $price;
    private $tollTaxRate;

    public function __construct($prodYear, $companyName,
$vehicleName, $color, $price, $tollTaxRate) {
        parent::setValues($prodYear, $companyName);
        $this->vehicleName = $vehicleName;
        $this->color = $color;
        $this->price = $price;
        $this->tollTaxRate = $tollTaxRate;
    }

    public function display() {
        $parentValues = parent::getValues();
        echo "$parentValues<br>Vehicle Name: {$this-
>vehicleName}<br>Color: {$this->color}<br>Price: {$this-
>price}<br>Toll Tax Rate: {$this->tollTaxRate}";
    }
}

// Create an object of TwoWheeler
$twoWheeler = new TwoWheeler();
$twoWheeler->setValues(2020, "Honda");
$twoWheeler->setAdditionalValues("Scooter", "Red");

// Create an object of FourWheeler
$fourWheeler = new FourWheeler(2019, "Toyota", "Sedan",
"Blue", 25000, 5.0);

// Display details for both objects
echo "<h2>Two-Wheeler Details</h2>";
echo $twoWheeler->getValues();
echo "<h2>Four-Wheeler Details</h2>";
$fourWheeler->display();


echo "<hr>Today is " . date("d/m/Y") . "<br>";
echo "The time is " . date("h:i:sa");

?>
```

Output:


WDPHP_Lab-07.pdf
localhost/PHPLabs/Lab7/7_4.php
localhost/PHPLabs/Lab7/7_4.php

```
Two-Wheeler Details

Production Year: 2020
Company Name: Honda
Name of Vehicle: Scooter
Color: Red

Four-Wheeler Details

Production Year: 2019
Company Name: Toyota
Vehicle Name: Sedan
Color: Blue
Price: 25000
Toll Tax Rate: 5
________________________________
Today is 30/08/2023
The time is 12:49:19pm
```