**PART-A**

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**PA1: Create an HTML form with field for user’s name, email and message. Write a PHP**

**script to handle form data submission and display the submitted information.**



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**index.html:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Contact FORM</title>

</head>

<body>

<h2 >Contact Form</h2>

<form action="submit\_form.php" method="post">

<label for="name">Name</label><br>

<input type="text" name="name" placeholder="Enter your name" required><br><br>

<label for="email" >Email</label><br>

<input id="email" type="email" name="email" placeholder="Enter your email" required>

<br><br>

<label for="message">Message</label><br>

<textarea name="message" id="message" cols="21" rows="4" required></textarea><br><br>

<input type="submit" value="submit"

</form>

</body>

</html>

**submission\_form.php**

<?php

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

$name=$\_POST["name"];

$email=$\_POST["email"];

$message=$\_POST["message"];

echo "<h2> Form Submission Result</h2>";

echo "<p><strong>Name:</strong>$name</p>";

echo "<p><strong>Email:</strong>$email</p>";

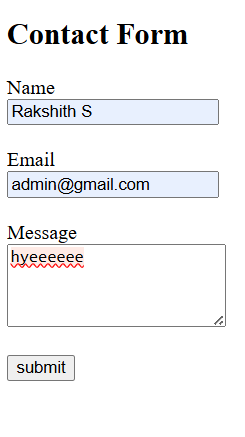
echo "<p><strong>Message:</strong>$message</p>";

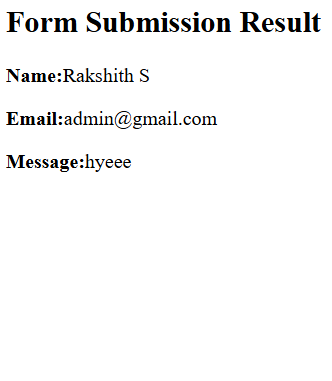
}else{

echo"<p>Access denied.</p>";

}

?>

**OUTPUT:**



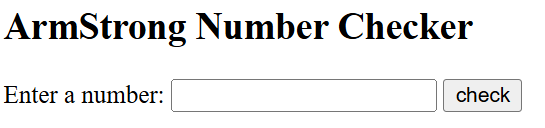
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**PA2: Write a PHP program that collects input from the user through a textbox and checks**

**whether the given number is an Armstrong number or not.**

**1. If the number is indeed an Armstrong number, display all numbers in range from 1 to that specified number (Note: 0 is Not an Armstrong Number).**

**2. Perform text validation, including checks for positive integers and general text input.**



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**Armstrong.php**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>ArmStrong Number Checker</title>

</head>

<body>

<h2>Armstong Number Checker</h2>

<form action="" method="post">

<label for="number">Enter a Number:</label>

<input type="text" id="number" name="number" value="<?php echo isset($\_POST['number'])?$\_POST['number']:' ';?>"required>

<input type="submit" value="Check">

</form>

<?php

function isArmstrong($num){

$originalNum=$num;

$sum=0;

$digits=strlen($num);

while($num>0){

$digit=$num%10;

$sum +=pow($digit,$digits);

$num=(int)($num/10);

}

return $originalNum==$sum;

}

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

$inputNumber=$\_POST["number"];

if(is\_numeric($inputNumber)&&$inputNumber>0 && $inputNumber==(int)$inputNumber){

echo"<h3>Results:</h3>";

if(isArmstrong($inputNumber)){

echo "<p>$inputNumber is an ArmStrong number.</p>";

echo "<p>ArmStrong numbers in the range from 1 to $inputNumber:</p>";

for($i=1;$i<=$inputNumber;$i++){

if(isArmstrong($i)){

echo " $i ";

}

}

}else{

echo "<p>$inputNumber is not an ArmStrong Number.</p>";

}

}

else{

echo "<p> please enter a positive Integer </p>";

}

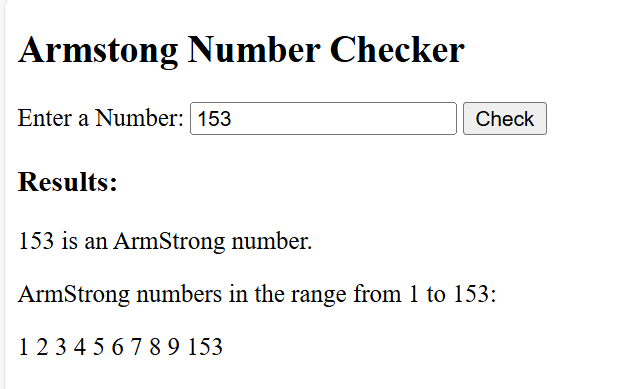
}

?>

</body>

</html>

**OUTPUT:**

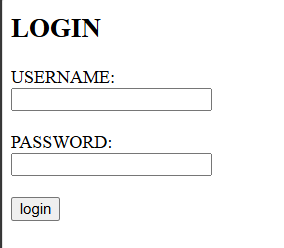


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**PA3: Write a PHP program demonstrating the usage of sessions to store and retrieve user**

**credentials like username and password. Combine the login, welcome, and logout**

**functionalities into two files –‘index.php’ and ‘welcome.php’.**

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**index.php**

<?php

session\_start();

if(isset($\_SESSION['username'])){

    header("Location:welcome.php");

    exit();

}

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

    $username=$\_POST["username"];

    $password=$\_POST["password"];

    if($username==="user2"&&$password==="password")

    {

        $\_SESSION["username"]=$username;

        header("location:welcome.php");

        exit();

    }else{

        $error\_message="Invalid username or password.Please try again";

    }

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Login</title>

</head>

<body>

   <h2>LOGIN</h2>

   <form action="" method="post">

    <label for="username">USERNAME:</label>

    <br>

    <input type="text" id="username" name="username" required><br><br>

    <label for="password">PASSWORD:</label>

    <br>

    <input type="password" id="password" name="password" required>

    <br><br>

    <input type="submit" value="login">

    <br>

    <?php if (isset($error\_message)){?>

        <p style="color:red;"><?php echo "$error\_message";?></p>

        <?php

    }

    ?>

   </form>

</body>

</html>

**welcome.php**

<?php

session\_start();

if(!isset($\_SESSION['username'])){

    header("Location:index.php");

    exit();

}

if(isset($\_GET['logout'])&& $\_GET['logout']==1){

    $\_SESSION=array();

    session\_destroy();

    header("Location:index.php");

    exit();

}

?>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Welcome</title>

</head>

<body>

    <h2>Welcome,<?php echo $\_SESSION['username'];?></h2>

    <br>

    <p>This is secure area . You are logged in</p>

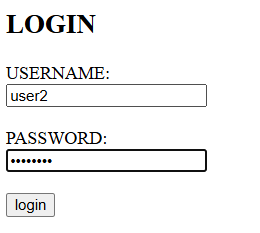
    <br>

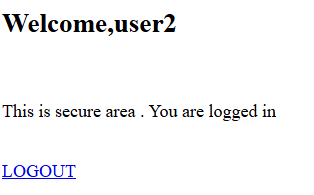
    <a href="welcome.php?logout=1">LOGOUT</a>

</body>

</html>

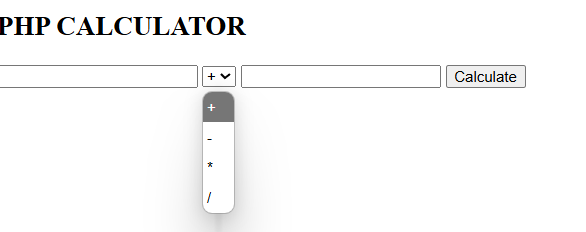
**OUTPUT:**





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**PA4: Write a simple PHP program with a user interface for a mathematical calculator using HTML forms. Perform division by zero operation with appropriate display of messages. Perform text validation, special character validation for textboxes with appropriate display of messages.**

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**Calculator.php**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Simple Calculator</title>

</head>

<body>

    <h2>PHP CALCULATOR</h2>

    <form action="" method="post">

        <input type="text" id="num1" name="num1" pattern="[0-9]+" title="Please enter a valid number" placeholder="Enter the first number" value="<?php echo isset($\_POST['num1'])?$\_POST['num1']:' ';?>" required>

        <select name="operation" id="operation" required>

            <option value="Add">+</option>

            <option value="Substract">-</option>

            <option value="Multiply">\*</option>

            <option value="Divide">/</option>

        </select>

        <input type="text" id="num2" name="num2" pattern="[0-9]+" title="Please enter a valid number" placeholder="Enter the second number" value="<?php echo isset($\_POST['num2'])?$\_POST['num2']:' ';?>" required>

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

    </form>

    <?php

    if($\_SERVER["REQUEST\_METHOD"]=="POST"){

        $num1=$\_POST["num1"];

        $num2=$\_POST["num2"];

        $operation=$\_POST["operation"];

        if(!is\_numeric($num1)||!is\_numeric($num2)){

            echo "<p style='color:red;'>Please enter valid number</p>";

        }else{

            switch($operation){

                case "Add":

                    $result=$num1+$num2;

                    break;

                case "Substract":

                    $result=$num1-$num2;

                    break;

                case "Multiply":

                    $result=$num1\*$num2;

                    break;

                case "Divide":

                    if($num2==0){

                        echo"<p style='color:red;'>Error:Division by zero is not allowed</p>";

                        $result=null;

                    }else{

                    $result=$num1/$num2;

                    }

                    break;

        }

        if (isset($result)){

            echo"<p> Result: $result</p>";

    }

}

    }

    ?>

</body>

</html>

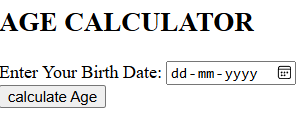
**OUTPUT:**





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**PA5: Write a PHP program with a user interface for calculating age based on the user's birth date. Display the age in years, months, and days.**

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**age.php**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Age Calculator</title>

    <style>

    </style>

</head>

<body>

    <h2>AGE CALCULATOR</h2>

    <form action="" method="post">

        Enter Your Birth Date: <input type="date" name="birthdate"

        value="<?php echo isset($\_POST['birthdate'])?$\_POST['birthdate']:'';?>"required>

        <br>

        <input type="submit" name="calculate" value="calculate Age">

    </form>

    <?php

    if(isset($\_POST['calculate'])){

        $birthdate=$\_POST['birthdate'];

        $bdate\_tstamp=strtotime($birthdate);

        $cdate\_tstamp=time();

        $age\_in\_seconds=$cdate\_tstamp-$bdate\_tstamp;

        $age\_years=floor($age\_in\_seconds/(365.25\*24\*60\*60));

        $age\_months=floor(($age\_in\_seconds-($age\_years\*365.25\*24\*60\*60))/(30.44\*24\*60\*60));

        $age\_days=floor(($age\_in\_seconds-($age\_years\*365.25\*24\*60\*60)-($age\_months\*30.44\*24\*60\*60))/(24\*60\*60));

        echo "<p style='color:blue;'> YOUR AGE IS: $age\_years years, $age\_months months, $age\_days days</p>";

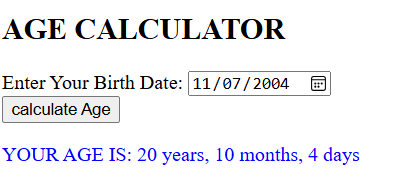
    }

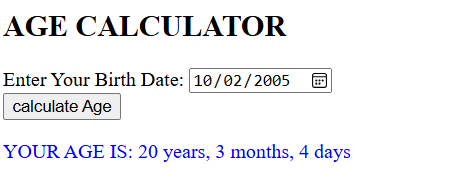
    ?>

</body>

</html>

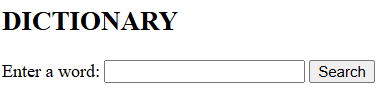
**OUTPUT:**





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**PA6: Write a PHP program to create an associative array representing a dictionary with words as keys and their meanings as values. Allow users to input a word and display its meaning if found, otherwise, display a "Word not found" message. (Please keep 10 pairs of keys and their meanings)**

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**dictionary.php**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>DICTIONARY</title>

</head>

<body>

    <h2>DICTIONARY</h2>

    <form action="" method="post">

        <label for="name">Enter a word:</label>

        <input type="text" id="word" name="word"

         value="<?php echo isset($\_POST['word'])?$\_POST['word']:' ';?>" required>

        <input type="submit" name="Search" id="" value="Search">

    </form>

    <?php

    $dictionary=array(

        "apple"=>"Round fruit",

        "cat"=>"Four legged",

        "lion"=>"King of forest",

        "tiger"=>"National animal",

        "banana"=>"Curved fruit",

        "carrot"=>"Orange root vegetable",

        "dog"=>"domestic Animal",

        "elephant"=>"Large mammal",

        "flower"=>"reproductive plant part",

        "college"=>"Students ",

    );

    if($\_SERVER["REQUEST\_METHOD"]=="POST"){

        $searchWord=strtolower($\_POST["word"]);

        if(array\_key\_exists($searchWord,$dictionary)){

            $meaning=$dictionary[$searchWord];

            echo"<p> Meaning of \"$searchWord\" :$meaning </p>";

        }else{

            echo" <h3> Word not found</h3>";

        }

    }

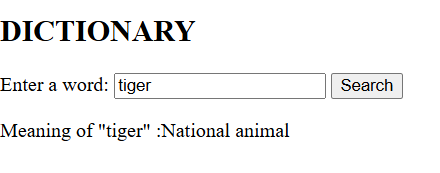
    ?>

</body>

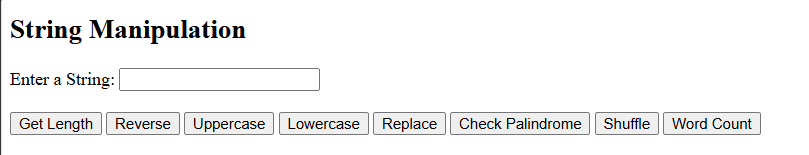
</html>

**OUTPUT:**





**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PA7: Write a PHP program that includes a user form with a text field and submit buttons for various string manipulations. It will display the result accordingly. (for replace, replace ‘a’ with ‘x’).**

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**string\_manipulation.php**

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>String Manipulation</title>

</head>

<body>

    <h2>String Manipulation</h2>

    <form action="" method="post">

        <label for="inputstring">Enter a String:</label>

        <input type="text" id="inputstring" name="inputstring"

        value="<?php echo isset($\_POST['inputstring'])?$\_POST['inputstring']:' ';?>" required><br><br>

        <input type="submit" name="operation" value="Get Length">

        <input type="submit" name="operation" value="Reverse">

        <input type="submit" name="operation" value="Uppercase">

        <input type="submit" name="operation" value="Lowercase">

        <input type="submit" name="operation" value="Replace">

        <input type="submit" name="operation" value="Check Palindrome">

        <input type="submit" name="operation" value="Shuffle">

        <input type="submit" name="operation" value="Word Count">

    </form>

    <?php

    if(isset($\_POST['inputstring'])){

        $inputstring=$\_POST['inputstring'];

        $operation=$\_POST['operation'];

        switch($operation){

            case 'Get Length':

                echo"<p>Length of string:" .strlen($inputstring). "</p>";

                break;

            case 'Reverse':

                echo"<p>Reverse :" .strrev($inputstring). "</p>";

                break;

            case 'Uppercase':

                echo"<p>Uppercase:" .strtoupper($inputstring). "</p>";

                break;

            case 'Lowercase':

                echo"<p>Lowercase:" .strtolower($inputstring). "</p>";

                break;

            case 'Replace':

                $resultstring=str\_replace('a','x',$inputstring);

                echo"<p>After Replacing 'a' with 'x': $resultstring </p>";

                break;

            case 'Check Palindrome':

                if(strtolower($inputstring)==strrev(strtolower($inputstring))){

                    echo"<p>The string is palindrome </p>";

                }else{

                    echo"<p>The string is not a palindrome. </p>";

                }

                break;

            case 'Shuffle':

                echo"<p>Shuffe string:" .str\_shuffle($inputstring). "</p>";

                break;

            case 'Word Count':

                $words=str\_word\_count($inputstring);

                echo"<p>Word count: $words </p>";

                break;

            default:

            echo"<p>Please select a valid operator.</p>";

            break;

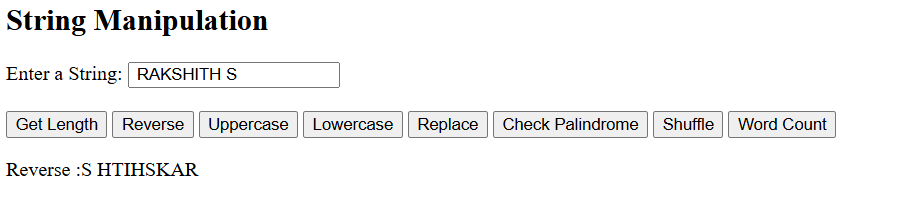
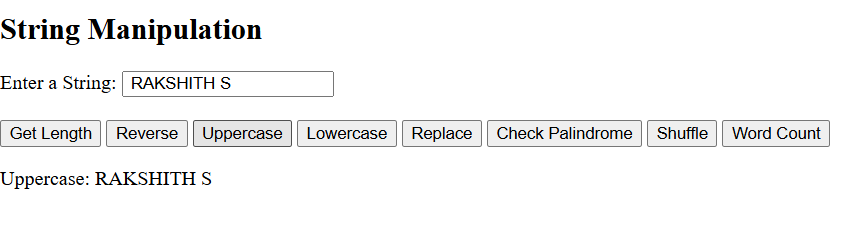
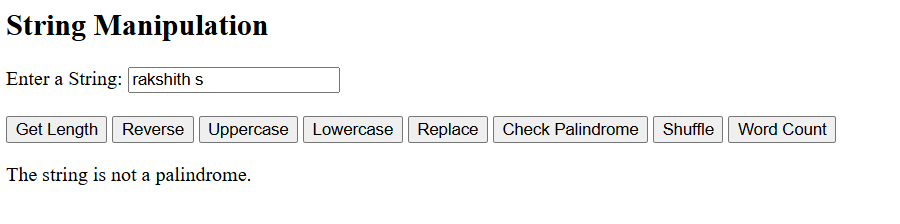
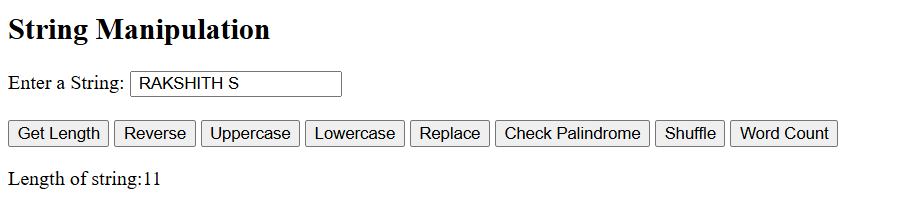
        }

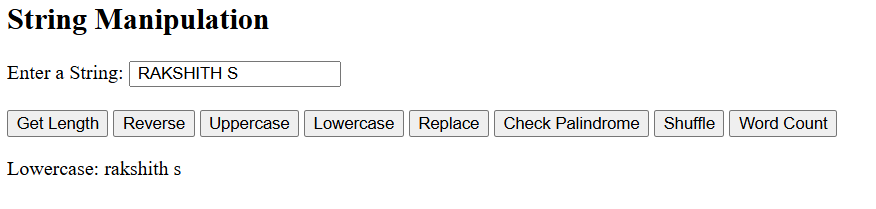
    }

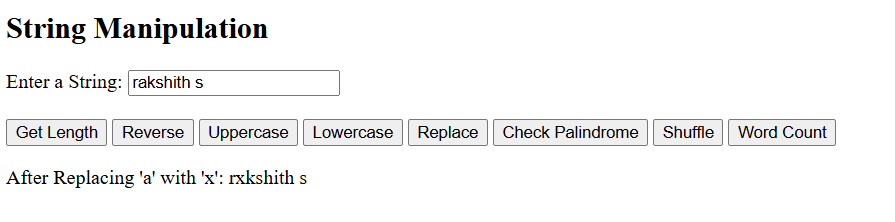
    ?>

</body>

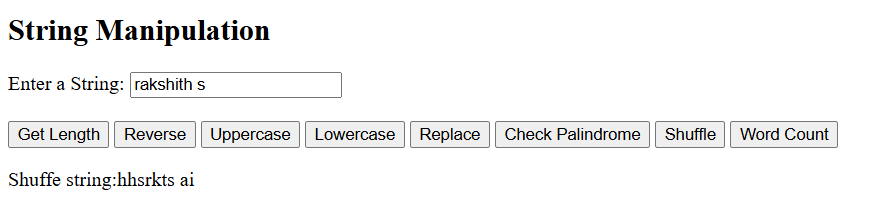
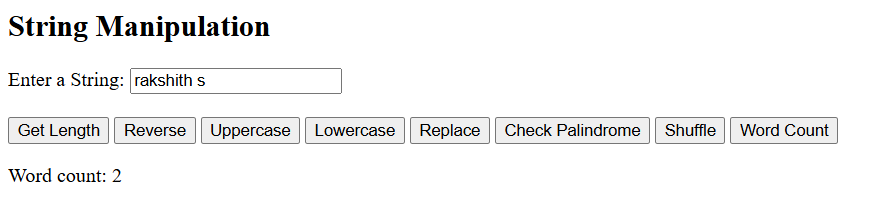
</html>

**OUTPUT**

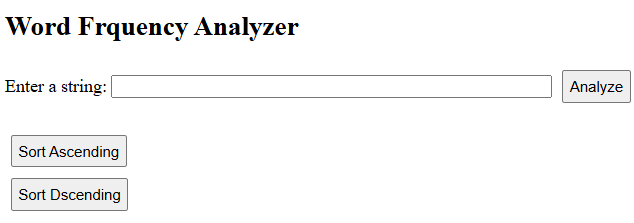








**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* PA8: Write a PHP user interface program with an HTML form to input a string. Upon submission, it will display the number of times each word occurs, ignoring the distinction between capital and lowercase letters. It should also print the most and least used words. Additionally, include buttons for sorting data in ascending order and descending order.**

****

**NAME: RAKSHITH S ROLL NO:22541**

**CLASS: III BCA**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**word\_frequency.php**

<?php

session\_start();

?>

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Word Frquency Analyzer</title>

</head>

<body>

    <h2>Word Frquency Analyzer</h2>

    <form action="" method="post">

        Enter a string: <input type="text" name="str" size="50"

        value="<?php echo isset($\_POST["str"])?$\_POST["str"]:(isset($\_SESSION["str"])?$\_SESSION["str"]:"");?>">

        <input type="submit" name="analyzeBtn" value="Analyze" Style="padding:5px;margin:5px">

    </form>

    <?php

    function displayResult($arr){

        echo"<h3> Word Frequency Analyzer</h3>";

        foreach($arr as $key=>$value){

            echo $key. ":" .$value ."times <br>";

        }

        if(!empty($arr)){

            $sarr=$\_SESSION["Rsar"];

            $max=$\_SESSION["max"];

            $min=$\_SESSION["min"];

            foreach($sarr as $key=>$value){

                if($sarr[$key]==$max ){

                    echo"<h3> The most used word is:" .$key. "(used $max times)</h3>";

                    break;

                }

            }

            foreach($sarr as $key=>$value){

                if($sarr[$key]==$min ){

                    echo"<h3> The least used word is:" .$key. "(used $min times)</h3>";

                    break;

                }

            }

        }

    }

    if(isset($\_POST["analyzeBtn"])){

        $words=trim($\_POST["str"]);

        if(strlen($words)>0){

            session\_unset();

            $\_SESSION["str"]=$words;

            $wordsArray=explode(' ',$words);

            $frequency=array();

            foreach($wordsArray as $word){

                $word=trim($word);

                if(strlen($word)>0){

                    $word=strtolower($word);

                    if(isset($frequency[$word])){

                        $frequency[$word]+=1;

                    }else{

                        $frequency[$word]=1;

                    }

                }

            }

            $sArr=$frequency;

            $rArr=$frequency;

            $sAr=array\_values($frequency);

            $krAr=$frequency;

            ksort($sArr);

            krsort($rArr);

            sort($sAr);

            arsort($krAr);

            $\_SESSION["Asc"]=$sArr;

            $\_SESSION["Dsc"]=$rArr;

            $\_SESSION["Rsar"]=$krAr;

            $\_SESSION["max"]=$sAr[count($sAr)-1];

            $\_SESSION["min"]=$sAr[0];

            displayResult($frequency);

        }

    }

    if(isset($\_POST["ASortBtn"])){

        $ar=$\_SESSION["Asc"];

        displayResult($ar);

    }

    if(isset($\_POST["DSortBtn"])){

        $ar=$\_SESSION["Dsc"];

        displayResult($ar);

    }

    ?>

<form method="post">

    <br>

    <input type="submit" name="ASortBtn" value="Sort Ascending" Style="padding:5px;margin:5px">

<br>

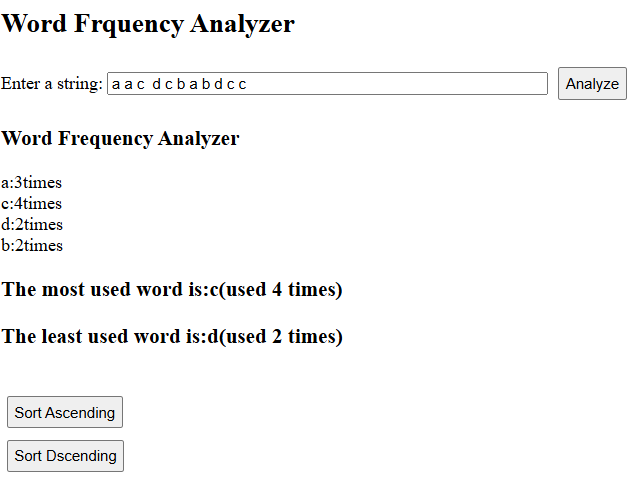
    <input type="submit" name="DSortBtn" value="Sort Dscending" Style="padding:5px;margin:5px">

</form>

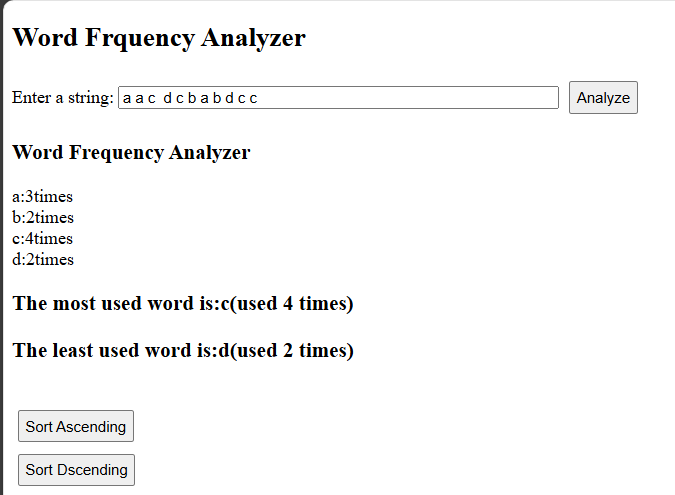
</body>

</html>

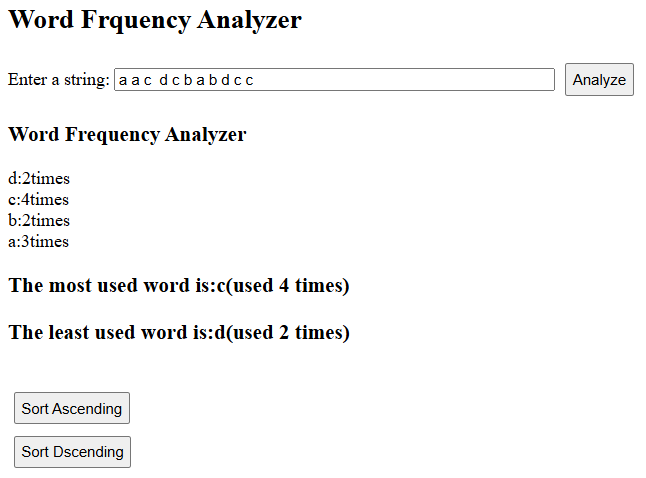
**OUTPUT:**



**Ascending:**



**Descending:**



**PART-B**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB1: PHP program to implement student registration form using Labels, Text Boxes, Text Area, Checkbox, Radio Buttons, Select and Submit button. (First Name, Last Name, Address, E-Mail, Mobile, City, State, Gender, Hobbies, Blood Group). Display user inserted value in a new PHP page in a neat format.**

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**CLASS: III BCA**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Student\_registration.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Student Registration Form</title>

<style>

body{

justify-self: center;

}

table{

border-collapse: collapse;

width: 100%;

}

th,td{

padding: 8px;

text-align: left;

}

</style>

</head>

<body>

<h2>Student Registration Form</h2>

<form action="Student\_display.php" method="post">

<table>

<tr>

<td><label for="firstname">First Name:</label></td>

<td><input type="text" id="firstname" name="firstname" required></td>

</tr>

<tr>

<td><label for="lastname">Last Name:</label></td>

<td><input type="text" id="lastname" name="lastname" required></td>

</tr>

<tr>

<td><label for="address">Address:</label></td>

<td><textarea id="address" name="address" required></textarea></td>

</tr>

<tr>

<td><label for="email">E-mail:</label></td>

<td><input type="email" id="email" name="email" required></td>

</tr>

<tr>

<td><label for="mobile">Mobile:</label></td>

<td><input type="text" id="mobile" name="mobile" required></td>

</tr>

<tr>

<td><label for="city">City:</label></td>

<td><input type="text" id="city" name="city" required></td>

</tr>

<tr>

<td><label for="state">State:</label></td>

<td><input type="text" id="state" name="state" required></td>

</tr>

<tr>

<td><label for="gender">Gender:</label></td>

<td>

<input type="radio" id="male" name="gender" value="Male" required>

<label for="male">Male</label>

<input type="radio" id="female" name="gender" value="Female"requireds>

<label for="male">Female</label>

</td>

</tr>

<tr>

<td><label for="hobbies">Hobbies:</label></td>

<td>

<input type="checkbox" id="hobby1" name="hobbies[]" value="Reading">

<label for="hobby1">Reading</label>

<input type="checkbox" id="hobby2" name="hobbies[]" value="Sports">

<label for="hobby2">Sports</label>

<input type="checkbox" id="hobby3" name="hobbies[]" value="Music">

<label for="hobby3">Music</label>

</td>

</tr>

<tr>

<td><label for="bloodGroup">Blood Group:</label></td>

<td>

<select name="bloodGroup" id="bloodGroup"required>

<option value="">Select</option>

<option value="A+">A+</option>

<option value="A-">A-</option>

<option value="B+">B+</option>

<option value="B-">B-</option>

<option value="O+">O+</option>

<option value="O-">O-</option>

<option value="AB+">AB+</option>

<option value="AB-">AB-</option>

</select>

</td>

</tr>

</table>

<br>

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

</form>

</body>

</html>

**Student\_display.php**

<!DOCTYPE html>

<html lang="en">

<head>

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Student Information</title>

</head>

<body>

<h2>Student Information</h2>

<?php

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

echo "<p><strong>First Name:</strong>" .$\_POST["firstname"]. "</p>";

echo "<p><strong>Last Name:</strong>" .$\_POST["lastname"]. "</p>";

echo "<p><strong>Address:</strong>" .$\_POST["address"]. "</p>";

echo "<p><strong>E-mail:</strong>" .$\_POST["email"]. "</p>";

echo "<p><strong>Mobile:</strong>" .$\_POST["mobile"]. "</p>";

echo "<p><strong>City:</strong>" .$\_POST["city"]. "</p>";

echo "<p><strong>State:</strong>" .$\_POST["state"]. "</p>";

echo "<p><strong>Gender:</strong>" .$\_POST["gender"]. "</p>";

if(!empty($\_POST["hobbies"])){

echo "<p><strong>Hobbies:</strong>" .implode(",",$\_POST["hobbies"]). "</p>";

}

echo "<p><strong>Blood Group:</strong>" .$\_POST["bloodGroup"]. "</p>";

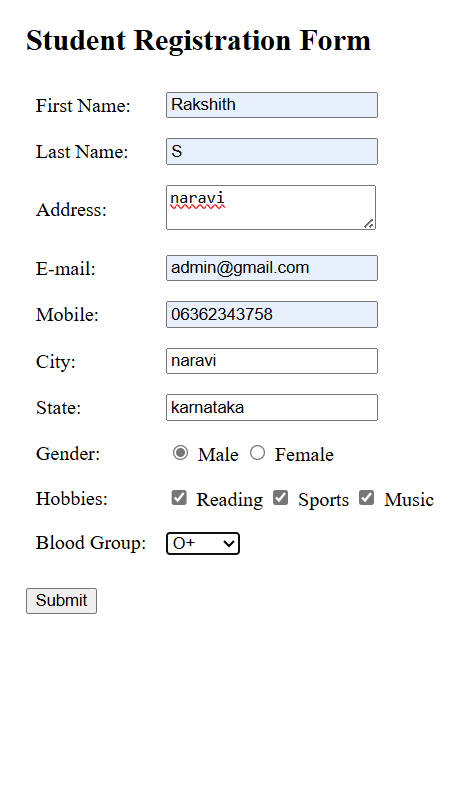
}

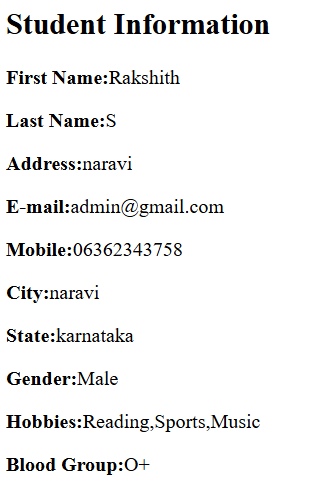
?>

</body>

</html>

**OUTPUT:**





**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB2: Develop a PHP program that facilitates the addition, multiplication of two matrices. Utilize HTML for the user interface and PHP for the backend logic. Dynamically generate the required number of textboxes based on the specified number of rows and columns. Implement three distinct buttons to perform each matrix operation For instance.**

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**CLASS: III BCA**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Matrix.php**

<!DOCTYPE html>

<html>

<head>

<title>Matrix Operations</title>

</head>

<body>

<h2>Matrix Operations</h2>

<form method="post" action="">

<label>Enter number of rows:</label>

<input type="number" name="rows" value="<?php echo isset($\_POST['rows'])? $\_POST['rows']:' '; ?>" required><br><br>

<label>Enter number of columns:</label>

<input type="number" name="cols" value="<?php echo isset($\_POST['cols'])? $\_POST['cols']:' ';?>" required><br><br>

<?php

if(isset($\_POST['rows']) && isset($\_POST['cols'])) {

$rows = $\_POST['rows'];

$cols = $\_POST['cols'];

echo '<h3>Matrix A:</h3>';

echo '<table>';

for($i = 0; $i < $rows; $i++){

echo '<tr>';

for($j = 0; $j < $cols; $j++){

$valueA = isset($\_POST['matrixA'][$i][$j]) ? $\_POST['matrixA'][$i][$j] : '';

echo '<td><input type="number" name="matrixA['.$i.']['.$j.']" value="'.$valueA.'" required></td>';

}

echo '</tr>';

}

echo '</table>';

echo '<h3>Matrix B:</h3>';

echo '<table>';

for($i = 0; $i < $rows; $i++){

echo '<tr>';

for($j = 0; $j < $cols; $j++){

$valueB = isset($\_POST['matrixB'][$i][$j]) ? $\_POST['matrixB'][$i][$j] : '';

echo '<td><input type="number" name="matrixB['.$i.']['.$j.']" value="'.$valueB.'" required></td>';

}

echo '</tr>';

}

echo '</table>';

}

?>

<br><br>

<input type="submit" name="add" value="Add Matrices">

<input type="submit" name="multiply" value="Multiply Matrices">

</form>

<?php

if(isset($\_POST['add']) || isset($\_POST['multiply'])){

if(isset($\_POST['matrixA']) && isset($\_POST['matrixB'])){

$matrixA = $\_POST['matrixA'];

$matrixB = $\_POST['matrixB'];

$rowsA = count($matrixA);

$colsA = count($matrixA[0]);

$rowsB = count($matrixB);

$colsB = count($matrixB[0]);

if(isset($\_POST['add'])) {

if ($rowsA == $rowsB && $colsA == $colsB) {

echo "<h2>Result of Addition:</h2>";

$addition = matrixAddition($matrixA, $matrixB);

displayMatrix($addition);

} else {

echo "Error: Matrices must have the same dimensions for addition.<br>";

}

}

if(isset($\_POST['multiply'])) {

if ($colsA == $rowsB) {

echo "<h2>Result of Multiplication:</h2>";

$multiplication = matrixMultiplication($matrixA, $matrixB);

displayMatrix($multiplication);

} else {

echo "Error: Number of columns in Matrix A must be equal to the number of rows in Matrix B for multiplication.<br>";

}

}

} else {

echo "<p>Please fill in all matrix elements.</p>";

}

}

function matrixAddition($matrixA, $matrixB){

$rows = count($matrixA);

$cols = count($matrixA[0]);

$result = array();

for($i = 0; $i < $rows; $i++){

for($j = 0; $j < $cols; $j++){

$result[$i][$j] = $matrixA[$i][$j] + $matrixB[$i][$j];

}

}

return $result;

}

function matrixMultiplication($matrixA, $matrixB){

$rowsA = count($matrixA);

$colsA = count($matrixA[0]);

$colsB = count($matrixB[0]);

$result = array();

for($i = 0; $i < $rowsA; $i++){

for($j = 0; $j < $colsB; $j++){

$result[$i][$j] = 0;

for($k = 0; $k < $colsA; $k++){

$result[$i][$j] += $matrixA[$i][$k] \* $matrixB[$k][$j];

}

}

}

return $result;

}

function displayMatrix($matrix){

echo '<table border="1">';

foreach($matrix as $row){

echo '<tr>';

foreach($row as $cell){

echo '<td>'.$cell.'</td>';

}

echo '</tr>';

}

echo '</table>';

}

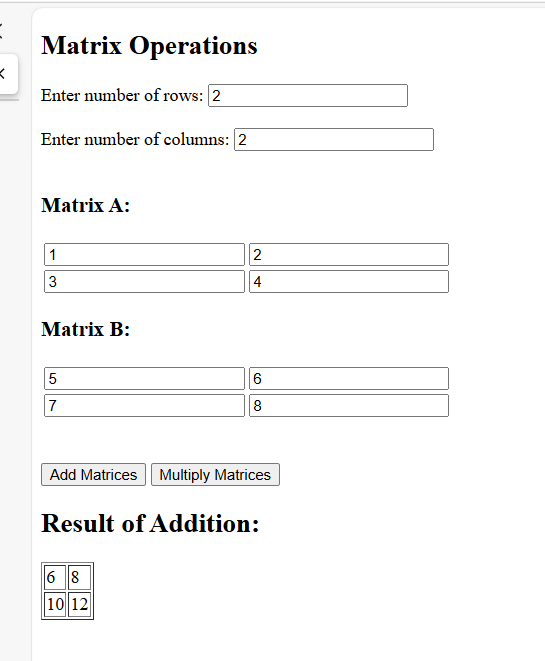
?>

</body>

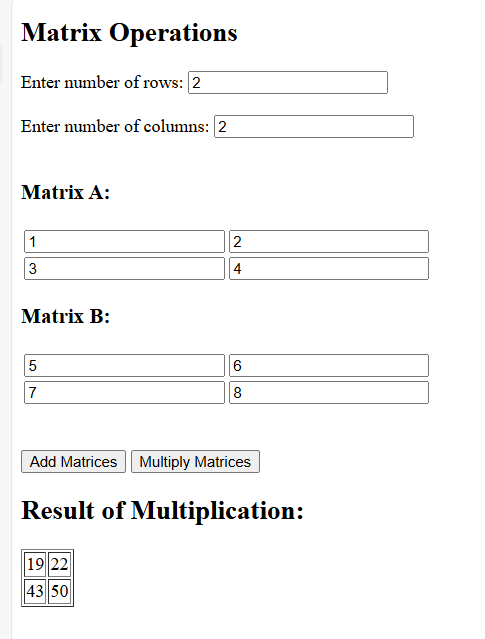
</html>

**OUTPUT:**

**Addition:**

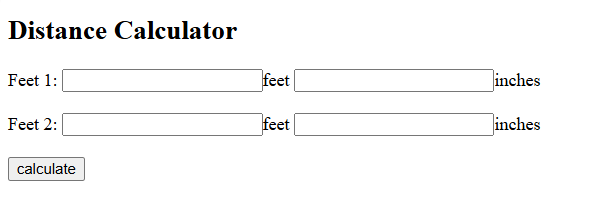
****

**Multiplication:**



**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB3: Write a PHP program that implements a class to add and find the difference of two distance values given in feet and inches. The user inputs are collected through an HTML form.**

****

**NAME: RAKSHITH S ROLL NO:22541**

**CLASS: III BCA**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB3.html**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Distance Calculator</title>

</head>

<body>

<h2>Distance Calculator</h2>

<form action="PB3.php" method="post">

<label for="feet1">Feet 1:</label>

<input type="number" name="feet1" required>feet

<input type="number" name="inches1" required>inches <br><br>

<label for="feet2">Feet 2:</label>

<input type="number" name="feet2" required>feet

<input type="number" name="inches2" required>inches <br><br>

<input type="submit" value="calculate">

</form>

</body>

</html>

PB3.php

<?php

class Distance{

public $feet;

public $inches;

public function \_\_construct($feet,$inches){

$this->feet=$feet;

$this->inches=$inches;

}

public function add($feet2,$inches2){

$ft=$this->feet+$feet2;

$in=$this->inches+$inches2;

if($in>=12){

$ft+=floor($in/12);

$in=$in%12;

}

return new Distance($ft,$in);

}

public function subtract($feet2,$inches2){

$ft=$this->feet-$feet2;

$in=$this->inches-$inches2;

if($in<0){

$ft--;//reduce a foot

$in+=12;

}

return new Distance($ft,$in);

}

public function getDistance(){

return $this->feet." feet " .$this->inches. " inches";

}

}

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

$feet1=$\_POST["feet1"];

$inches1=$\_POST["inches1"];

$feet2=$\_POST["feet2"];

$inches2=$\_POST["inches2"];

$distance1=new Distance($feet1,$inches1);

$distance2=new Distance($feet2,$inches2);

//adding distance

$sum=$distance1->add($feet2,$inches2);

//finding difference

$difference=$distance1->subtract($feet2,$inches2);

echo "<h2> Result</h2>";

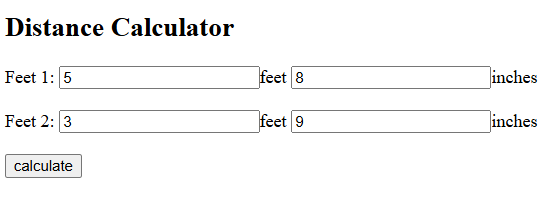
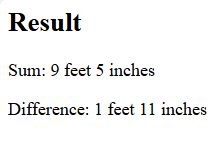
echo "<p> Sum: " .$sum->getDistance(). "</p>";

echo "<p> Difference: " .$difference->getDistance(). "</p>";

}

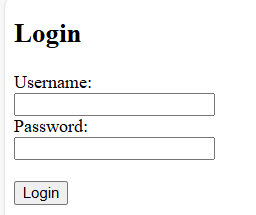
?>

**OUTPUT:**



**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB4: Program to implement a login form where users enter their username and password. Validate the credentials against data stored in a MySQL database and grant access if they are correct.**

****

**NAME: RAKSHITH S ROLL NO:22541**

**CLASS: III BCA**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Login.php**

<?php

$host="localhost:3336";

$username="root";

$password="";

$database="lab";

$conn=new mysqli($host,$username,$password,$database);

if($conn->connect\_error){

die("Connection failed: ".$conn->connect\_error);

}

function login($username,$password,$conn){

$sql="SELECT \* FROM login WHERE Username='$username' AND Password='$password'";

$result=$conn->query($sql);

if($result->num\_rows==1){

echo"Login Successfull!";

}else{

echo "Invalid Usename or Password";

}

}

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

$username=$\_POST["username"];

$password=$\_POST["password"];

login($username,$password,$conn);

}

$conn->close();

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>login Form</title>

</head>

<body>

<h2>Login</h2>

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"];?>">

<label for="username">Username:</label><br>

<input type="text" id="Username" name="username"

value="<?php echo isset($\_POST['username'])?$\_POST['username']:'';?>"required> <br>

<label for="password">Password:</label><br>

<input type="password" id="Username" name="password"

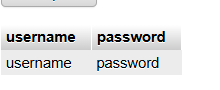
value="<?php echo isset($\_POST['password'])?$\_POST['password']:'';?>"required> <br><br>

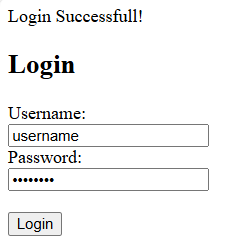
<input type="submit" value="Login">

</form>

</body>

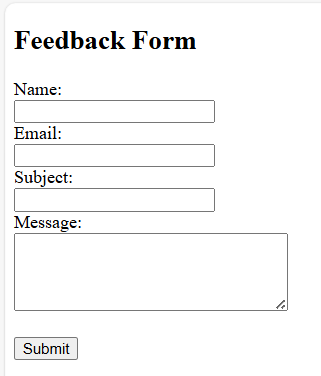
</html>

**OUTPUT:**



**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB5: Program to create a feedback form with fields for name, email, subject, and message. Store the submitted feedback data in a MySQL database for later review.**

****

**NAME: RAKSHITH S ROLL NO:22541**

**CLASS: III BCA**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\**

**feedback.php**

<?php

$host="localhost:3336";

$username="root";

$password="";

$database="lab";

$conn=new mysqli($host,$username,$password,$database);

if($conn->connect\_error){

die("Connection failed: ".$conn->connect\_error);

}

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

$name=$\_POST["name"];

$email=$\_POST["email"];

$subject=$\_POST["subject"];

$message=$\_POST["message"];

$stmt=$conn->prepare("INSERT INTO feedback (name,email, subject, message) VALUES (?,?,?,?)");

$stmt->bind\_param("ssss",$name,$email,$subject,$message);

if($stmt->execute()){

echo"Feedback submitted successfully!";

}else{

echo"Error:".$stmt->error;

}

$stmt->close();

}

$conn->close();

?>

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Feedback Form</title>

</head>

<body>

<h2>Feedback Form</h2>

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"];?>">

<label for="name">Name:</label><br>

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

<label for="email">Email:</label><br>

<input type="email" name="email" required><br>

<label for="subject">Subject:</label><br>

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

<label for="message">Message:</label><br>

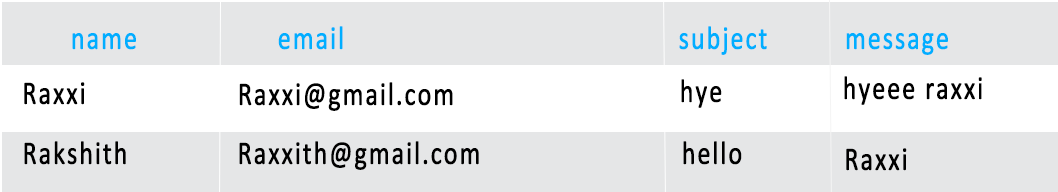
<textarea name="message" id="message" cols="30" rows="4"></textarea><br><br>

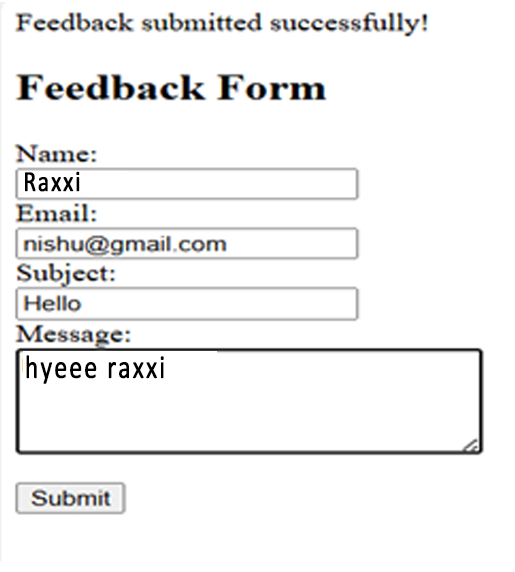
<input type="submit" value="Submit">

</form>

</body>

</html>

**OUTPUT:**

****

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB6: Develop a dynamic PHP application to efficiently manage and store customer information, encompassing key fields like Customer Number, Customer Name, Item Purchased, and Mobile Number in Database. This application should provide a userfriendly interface with strategically placed buttons to trigger specific functionalities. These functionalities include:**

**1. Add Customer Information: Clicking this button should dynamically reveal a form for entering new customer details. Include proper validation checks for mobile numbers (10 digits), and also for Customer id ensuring accuracy in data input.**

**2. Delete Customer Records: Triggering this button should prompt the appearance of a form, specifically requesting the Customer ID to identify and delete the corresponding customer record. And provide appropriate messages for incorrect inputs.**

**3. Search for Particular Entries: This function should unveil a search form when activated, allowing users to input Customer id to find specific customer records.**

**4. Sort Database Based on Customer Id: Clicking this button should facilitate the sorting of the entire database based on customer id.**

**5. Display Complete Set of Records: Activating this function should present a comprehensive display of all customer records.**

**6. Interface Design: Initially, the interface should only showcase functional buttons. Upon clicking a button, the respective form should dynamically appear, offering a tailored and focused user experience.**

**7. Give proper messages after every transaction.**

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**customer\_management.php**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Customer Management</title>

</head>

<body>

<button onclick="document.getElementById('addForm').style.display='block'">Add Customer Information</button>

<button onclick="document.getElementById('deleteForm').style.display='block'">Delete Customer Records</button>

<button onclick="document.getElementById('searchForm').style.display='block'">Search for Particular Entries</button>

<form id="sortForm" method="post" style="display:inline;" action="">

<input type="hidden" name="sort\_and\_display" value="true">

<input type="submit" value="Sort Database and Display All Records">

</form>

<form id="displayForm" method="post" style="display:inline;" action="">

<input type="hidden" name="display\_all" value="true">

<input type="submit" value=" Display All Records">

</form><br><br>

<div id="addForm" style="display:none;">

<form method="post">

Customer ID: <input type="text" name="customer\_id" required><br><br>

Customer Name: <input type="text" name="customer\_name" required><br><br>

Item Purchased: <input type="text" name="item\_purchased" required><br><br>

Mobile Number: <input type="text" name="mobile\_number" required><br><br>

<input type="submit" name="add\_customer" value="Add Customer">

</form>

</div>

<div id="deleteForm" style="display:none;">

<form method="post">

Customer ID: <input type="text" name="customer\_id" required><br><br>

<input type="submit" name="delete\_customer" value="Delete Customer">

</form>

</div>

<div id="searchForm" style="display:none;">

<form method="post">

Customer ID: <input type="text" name="customer\_id" required><br><br>

<input type="submit" name="search\_customer" value="Search Customer">

</form>

</div>

</body>

</html>

<?php

$servername="localhost:3336";

$username="root";

$password="";

$database="lab";

$conn=new mysqli($servername,$username,$password,$database);

if($conn->connect\_error){

die("Connection failed: ".$conn->connect\_error);

}

if(isset($\_POST['add\_customer'])){

$customer\_id=$\_POST['customer\_id'];

$customer\_name=$\_POST['customer\_name'];

$item\_purchased=$\_POST['item\_purchased'];

$mobile\_number=$\_POST['mobile\_number'];

if(strlen($mobile\_number)!=10||!ctype\_digit($mobile\_number)){

echo"Invalid mobile number";

}else{

$sql="INSERT INTO customer (custid,cname,itemname,mobileno)

VALUES ('$customer\_id','$customer\_name','$item\_purchased','$mobile\_number')";

if($conn->query($sql)===TRUE){

echo"Customer added successfully"."<br>";

}else{

echo"Error:".$sql."<br>".$conn->error;

}

}

}

if(isset($\_POST['delete\_customer'])){

$customer\_id=$\_POST['customer\_id'];

$sql="DELETE FROM customer WHERE custid='$customer\_id'";

if($conn->query($sql)==TRUE){

if($conn->affected\_rows>0){

echo"Customer deleted Successfully";

}else{

echo"Error:Customer ID ".$customer\_id." not found";

}

}else{

echo"Error deleting customer:".$conn->error;

}

}

if(isset($\_POST['search\_customer'])){

$customer\_id=$\_POST['customer\_id'];

$sql="SELECT \* FROM customer WHERE custid='$customer\_id'";

$result=$conn->query($sql);

if($result->num\_rows>0){

while($row=$result->fetch\_assoc()){

echo"Customer ID:".$row['custid'].", Name:".$row['cname'].",I tem Purchased:".$row['itemname'].",Mobile Number:".$row['mobileno']."<br>";

}

}else{

echo"NO results found";

}

}

if(isset($\_POST['display\_all'])){

$sql="SELECT \* FROM customer";

$result=$conn->query($sql);

// $result=$conn->query($sql);

if($result->num\_rows>0){

while($row=$result->fetch\_assoc()){

echo"Customer ID:".$row['custid'].",Name:".$row['cname'].",Item Purchased:".$row['itemname'].",Mobile Number:".$row['mobileno']."<br>";

}

}else{

echo"NO results found";

}

}

if(isset($\_POST['sort\_and\_display'])){

$sql="SELECT \* FROM customer ORDER by cname";

$result=$conn->query($sql);

if($result->num\_rows>0){

while($row=$result->fetch\_assoc()){

echo " Customer Id:".$row['custid'].", Name:".$row['cname'].",Item Purchased:".$row['itemname'].",Mobile number:".$row['mobileno']."<br>";

}

}else{

echo"no result found";

}

}

$conn->close();

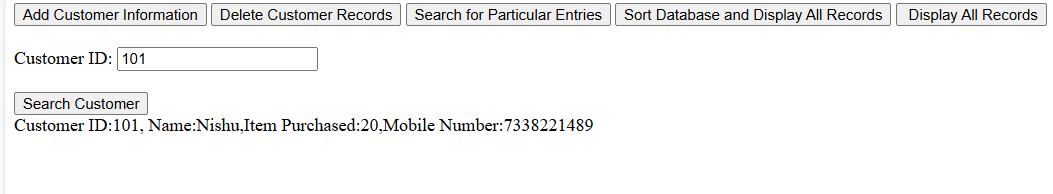
?>

**OUTPUT:**

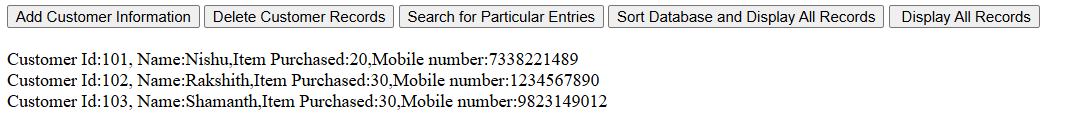
1. **Add Customer Information:**

****

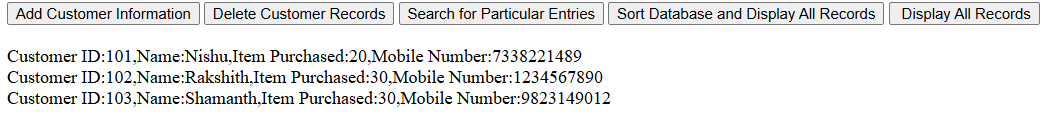
**2. Delete Customer Records:**

**3. Search for Particular Entries:**

**4. Sort Database Based on Customer Id:**



**5. Display Complete Set of Records:**



**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*PB7: A PHP and MySQL programme that features a book shopping form that takes in the book number, book title, price, quantity, and a option to choose the book code. The bill with the discounted amount and net bill amount is then displayed. Additionally, bill data are stored in the table. Code Discount rate 101 15% 102 20% 103 25% Any other 5% Find the discount amount and Net bill amount. Display the bill.**

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**CLASS: III BCA**

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**Book\_shopping.php**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Book Shopping Form</title>

<style>

table{

border-collapse:collapse;

width:100%;

}

td,th{

border:1px,solid black;

padding:5px;

text-align:left;

}

th{

background-color:#f2f2f2;

}

</style>

</head>

<body>

<h2>Book Shopping Form</h2>

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"];?>">

Book Number: <input type="number" name="book\_number" required><br><br>

Book Title: <input type="text" name="book\_title" required><br><br>

Price: <input type="number" name="price" step="0.01"required><br><br>

Quantity: <input type="number" name="quantity" required><br><br>

Book code:

<select name="book\_code">

<option value="101">101</option>

<option value="102">102</option>

<option value="103">103</option>

<option value="other">other</option>

</select><br><br>

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

</form>

<?php

$servername="localhost:3336";

$username="root";

$password="";

$database="lab";

$conn=new mysqli($servername,$username,$password,$database);

if($conn->connect\_error){

die("Connection failed: ".$conn->connect\_error);

}

function calDiscount($price,$quantity,$discount\_rate){

return($price\*$quantity)\*($discount\_rate/100);

}

if($\_SERVER["REQUEST\_METHOD"]=="POST"){

$book\_number=$\_POST["book\_number"];

$book\_title=$\_POST["book\_title"];

$price=$\_POST["price"];

$quantity=$\_POST["quantity"];

$book\_code=$\_POST["book\_code"];

switch($book\_code){

case '101':

$discount\_rate=15;

break;

case '102':

$discount\_rate=20;

break;

case '103':

$discount\_rate=25;

break;

default:

$discount\_rate=5;

}

$discount\_amount=calDiscount($price,$quantity,$discount\_rate);

$net\_bill=($price\*$quantity)-$discount\_amount;

$sql="INSERT INTO book (book\_number, book\_title, price, quantity, discount\_rate, discount\_amount, net\_bill)

VALUES('$book\_number','$book\_title','$price','$quantity','$discount\_rate','$discount\_amount', '$net\_bill') ";

if($conn->query($sql)===TRUE){

echo"Bill Saved Successfully";

}else{

echo"Error:".$sql. "<br>" .$conn->error;

}

echo "<h2 style='text-align:center;'> Book Bill</h2>";

echo "<table>";

echo "<tr>

<th>Book Number</th>

<th>Book title</th>

<th>Price</th>

<th>Quantity</th>

<th>Discount Rate(%)</th>

<th>Discount Amount</th>

<th>Net Bill Amount</th>

</tr>";

echo "<tr>";

echo"<td>".$book\_number."</td>";

echo"<td>".$book\_title."</td>";

echo"<td>".$price."</td>";

echo"<td>".$quantity."</td>";

echo"<td>".$discount\_rate."</td>";

echo"<td>".$discount\_amount."</td>";

echo"<td>".$net\_bill."</td>";

echo "</tr>";

echo"</table>";

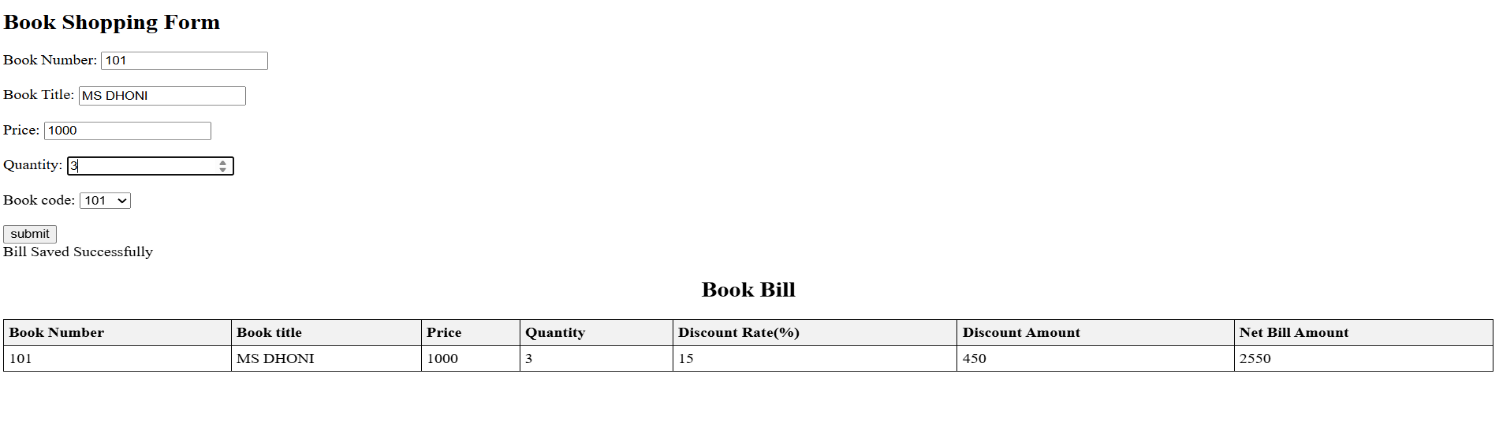
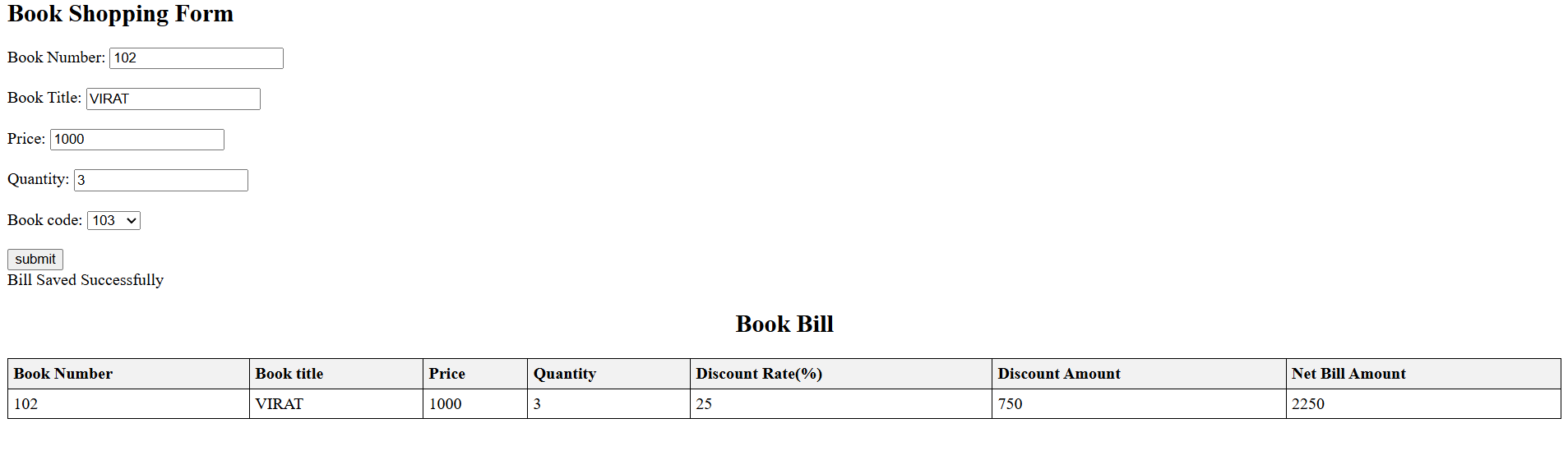
}

$conn->close();

?>

</body>

</html>

**OUTPUT:**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**PB8: Develop a web application for proficiently managing hotel reservations, employing PHP for backend logic and MySQL for data storage. The application should feature a well-structured database table encompassing essential fields such as Room Number (primary key), Room Type (e.g., single semi, single deluxe, double semi, double deluxe, dormitory), Capacity, and Status (booked or available). Within the application's user interface, provide a textbox for entering the room number and two distinct buttons for check-in and check-out functionalities. Ensure that both checkin and check-out operations are executed based on the entered room number, facilitating a seamless and intuitive user experience**

**A. Insert 5 records into the table through interface, reflecting both available and booked rooms.**

**B. Lists all available rooms and booked rooms on the webpage.**

**C. Change the booking status to "booked" when a user checks in.**

**D. Change the room status to "available" when a user checks out.**

**E. Displays appropriate messages for successful booking, check-out, or if the room number is not present or not in the expected status.**

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**Reservation.php**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Hotel Reservation System</title>

</head>

<body>

<h2>Hotel Reservation System</h2>

<h3>Insert Records</h3>

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"];?>">

<table>

<tr>

<td>Room Number:</td>

<td><input type="number" name="room\_number" required></td>

</tr>

<tr>

<td>Room Type</td>

<td>

<select name="room\_type" required>

<option value="single semi"> Single Semi</option>

<option value="single deluxe"> Single deluxe</option>

<option value="double semi"> Double Semi</option>

<option value="double deluxe"> Double deluxe</option>

<option value="dormitory"> Dormitory </option>

</select>

</td>

</tr>

<tr>

<td>Capacity:</td>

<td><input type="number" name="capacity" required></td>

</tr>

<tr>

<td>Status:</td>

<td>

<select name="status"required>

<option value="available">Available</option>

<option value="booked">Booked</option>

</select>

</td>

</tr>

</table>

<br>

<input type="submit" name="insert" value="Insert Record">

</form>

<?php

$servername="localhost:3336";

$username="root";

$password="";

$database="lab";

$conn=new mysqli($servername,$username,$password,$database);

if($conn->connect\_error){

die("Connection failed: ".$conn->connect\_error);

}

if(isset($\_POST['insert'])){

$room\_number=$\_POST["room\_number"];

$room\_type=$\_POST["room\_type"];

$capacity=$\_POST["capacity"];

$status=$\_POST["status"];

$sql\_insert="INSERT INTO rooms(room\_number,room\_type,capacity,status)

VALUES('$room\_number','$room\_type','$capacity','$status')";

if($conn->query($sql\_insert)===TRUE){

echo"Record inserted successsfully";

}else{

echo"Error:".$sql\_insert. "<br>" .$conn->error;

}

}

?>

<h3>Available Rooms</h3>

<?php

$sql\_available="SELECT \* FROM rooms WHERE status='available'";

$result\_available=$conn->query($sql\_available);

if($result\_available->num\_rows>0){

echo"<table border='1'>

<tr>

<th>Room number</th>

<th>Room Type</th>

<th>Caapacity</th>

</tr>";

while($row=$result\_available->fetch\_assoc()){

echo"<tr>

<td>".$row["room\_number"]."</td>

<td>".$row["room\_type"]."</td>

<td>".$row["capacity"]."</td>

</tr>";

}

echo"</table>";

}else{

echo"No available rooms";

}

?>

<h3>Booked Rooms</h3>

<?php

$sql\_booked="SELECT \* FROM rooms WHERE status='booked'";

$result\_booked=$conn->query($sql\_booked);

if($result\_booked->num\_rows>0){

echo"<table border='1'>

<tr>

<th>Room number</th>

<th>Room Type</th>

<th>Caapacity</th>

</tr>";

while($row=$result\_booked->fetch\_assoc()){

echo"<tr>

<td>".$row["room\_number"]."</td>

<td>".$row["room\_type"]."</td>

<td>".$row["capacity"]."</td>

</tr>";

}

echo"</table>";

}else{

echo"No booked rooms";

}

?>

<h3>Check-in</h3>

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"];?>">

Room Number: <input type="number" name="room\_number" required><br><br>

<input type="submit" name="check\_in" value="Check-in">

</form>

<h3>Check-out</h3>

<form method="post" action="<?php echo $\_SERVER["PHP\_SELF"];?>">

Room Number: <input type="number" name="room\_number" required><br><br>

<input type="submit" name="check\_out" value="Check-out">

</form>

<?php

// Check-in functionality

if (isset($\_POST['check\_in'])) {

$room\_number = $\_POST["room\_number"];

$sql\_check\_room = "SELECT \* FROM rooms WHERE room\_number = '$room\_number' AND status = 'available'";

$result\_check\_room = $conn->query($sql\_check\_room);

if ($result\_check\_room->num\_rows == 1) {

$sql\_check\_in = "UPDATE rooms SET status = 'booked' WHERE room\_number = '$room\_number'";

if ($conn->query($sql\_check\_in) === TRUE) {

echo "Room checked in successfully.";

} else {

echo "Error: " . $sql\_check\_in . "<br>" . $conn->error;

}

} else {

echo "Room is not available for check-in.";

}

}

// Check-out functionality

if (isset($\_POST['check\_out'])) {

$room\_number = $\_POST["room\_number"];

$sql\_check\_room = "SELECT \* FROM rooms WHERE room\_number = '$room\_number' AND status = 'booked'";

$result\_check\_room = $conn->query($sql\_check\_room);

if ($result\_check\_room->num\_rows == 1) {

$sql\_check\_out = "UPDATE rooms SET status = 'available' WHERE room\_number = '$room\_number'";

if ($conn->query($sql\_check\_out) === TRUE) {

echo "Room checked out successfully.";

} else {

echo "Error: " . $sql\_check\_out . "<br>" . $conn->error;

}

} else {

echo "Room is either not booked or does not exist.";

}

}

$conn->close();

?>

</body>

</html>

**OUTPUT:**

