

National Institute of Technology, Tiruchirappalli



Department of Computer Applications

Web Technology and its Applications Lab *Internal Lab*

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MCA – 2nd Year

1. Write a JSP program to display given numbers in words.

- **index.html**

```
<!DOCTYPE html>

<html>

<head>

<meta charset="ISO-8859-1">

<title>Convert To Words</title>

<body>

    <form method=get action="convertToWords.jsp">

        <h1>Enter a Number: </h1>

        <input type=text name=num><br><br>

        <input type=submit value="Submit">

    </form>

</body>

</head>

</html>
```

- **convertToWords.jsp**

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
    pageEncoding="UTF-8"%>

<!DOCTYPE html>

<html>

<head>

<meta charset="UTF-8">

<title>Number to Words</title>
```

</head>

<body>

```
<%!String numberToWords(char[] num) {
```

```
    String ans = "";
```

```
    int len = num.length;
```

```
    if (len == 0) {
```

```
        ans = ("The string is empty.");
```

```
        return ans;
```

```
    }
```

```
    if (len > 4) {
```

```
        ans = ("The given number has more than 4 digits.");
```

```
        return ans;
```

```
    }
```

```
    String[] onedigit = new String[] { "Zero", "One", "Two", "Three", "Four", "Five",  
    "Six", "Seven", "Eight",
```

```
        "Nine" };
```

```
    String[] twodigits = new String[] { "", "Ten", "Eleven", "Twelve", "Thirteen",  
    "Fourteen", "Fifteen", "Sixteen",
```

```
        "Seventeen", "Eighteen", "Nineteen" };
```

```
    String[] multipleoftens = new String[] { "", "", "Twenty", "Thirty", "Forty", "Fifty",  
    "Sixty", "Seventy",
```

```
"Eighty", "Ninety" };
```

```
String[] poweroftens = new String[] { "Hundred", "Thousand" };
```

```
if (len == 1) {
```

```
    ans = (onedigit[num[0] - '0']);
```

```
    return ans;
```

```
}
```

```
int x = 0;
```

```
while (x < num.length) {
```

```
    if (len >= 3) {
```

```
        if (num[x] - '0' != 0) {
```

```
            ans += onedigit[num[x] - '0'] + " " + poweroftens[len - 3] +  
            " ";
```

```
        }
```

```
        --len;
```

```
    } else {
```

```
        if (num[x] - '0' == 1) {
```

```
            int sum = num[x] - '0' + num[x + 1] - '0';
```

```
            ans += (twodigits[sum]);
```

```
            return ans;
```

```
        }
```

```

else if (num[x] - '0' == 2 && num[x + 1] - '0' == 0) {

    ans += ("Twenty");

    return ans;

}

else {

    int i = (num[x] - '0');

    if (i > 0)

        ans += (multipleoftens[i] + " ");

    else

        ans += "";

    ++x;

    if (num[x] - '0' != 0)

        ans += (onedigit[num[x] - '0']);

}

}

++x;

}

return ans;

}%>

```

```
<%
```

```
String n = (String) request.getParameter("num");
```

```
out.println(n);
```

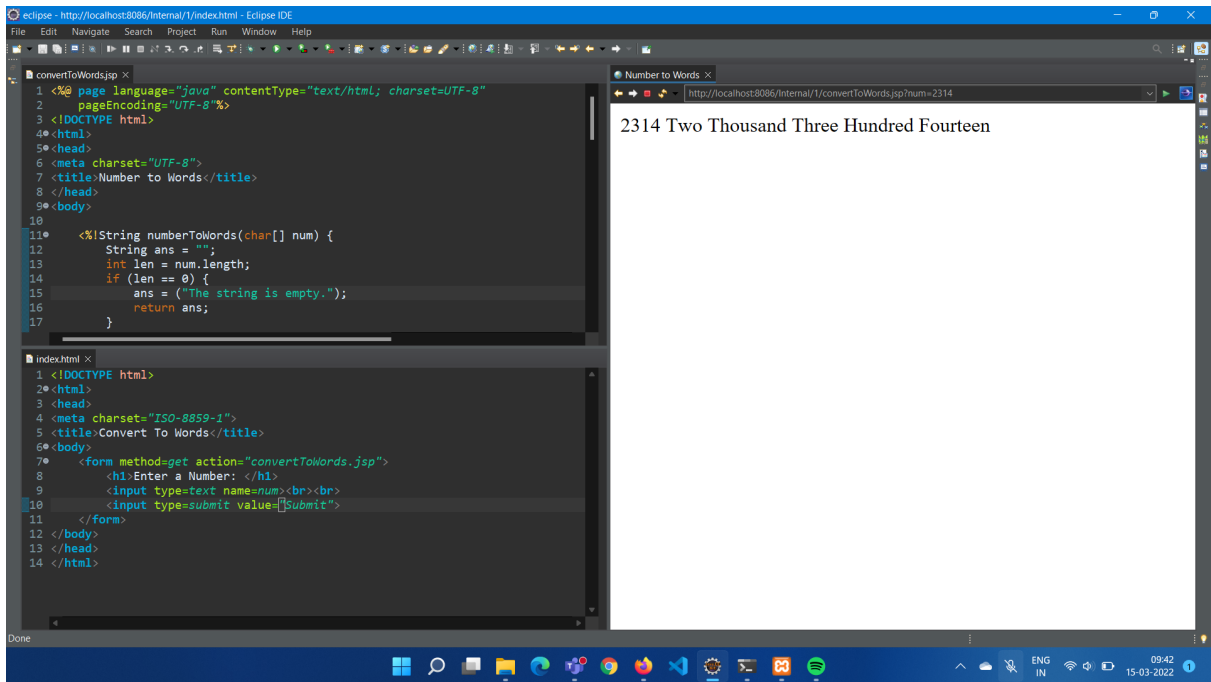
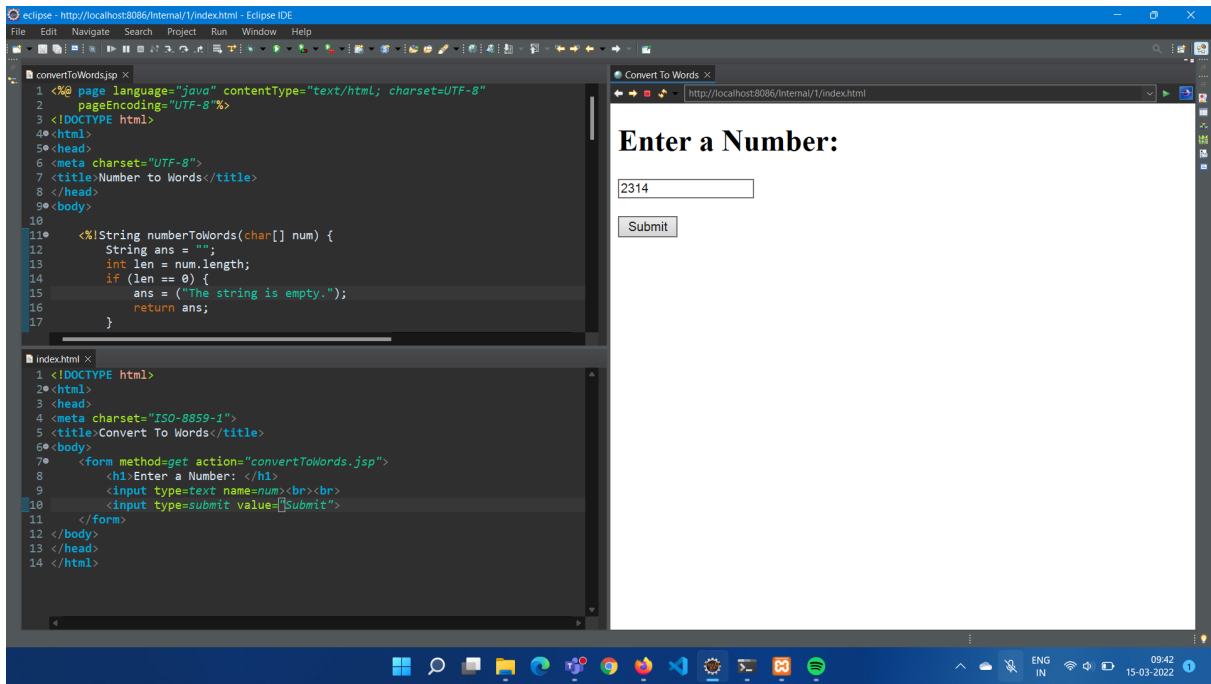
```
char[] ch = n.toCharArray();
```

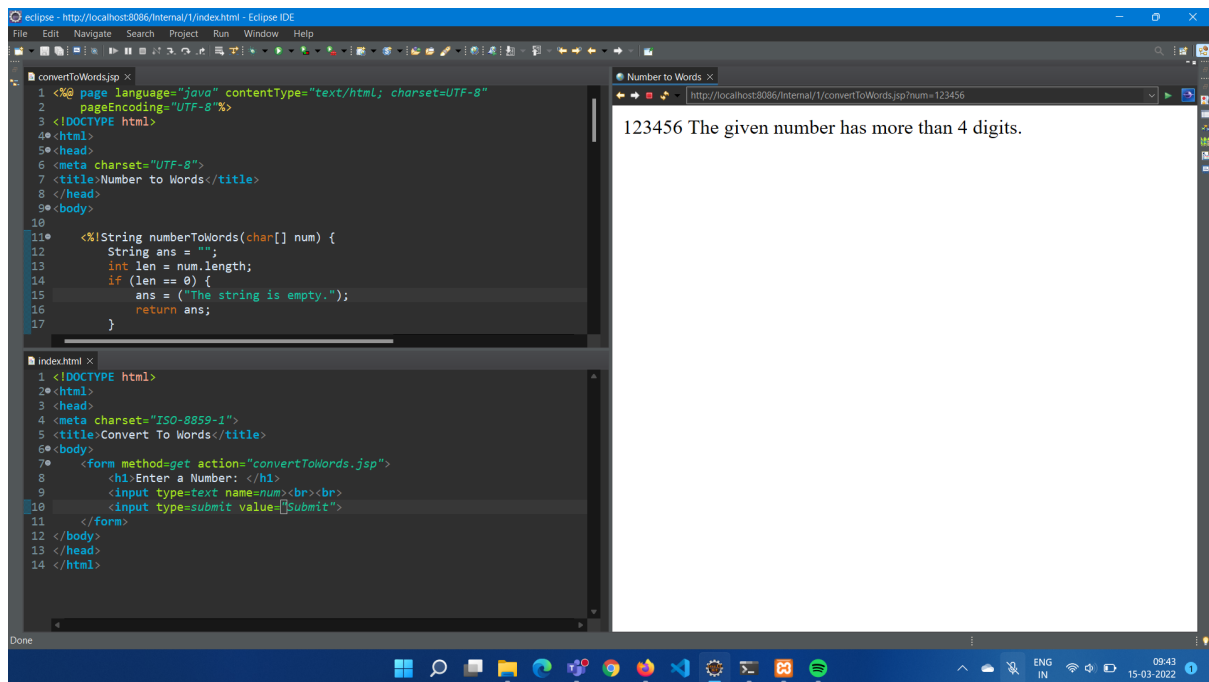
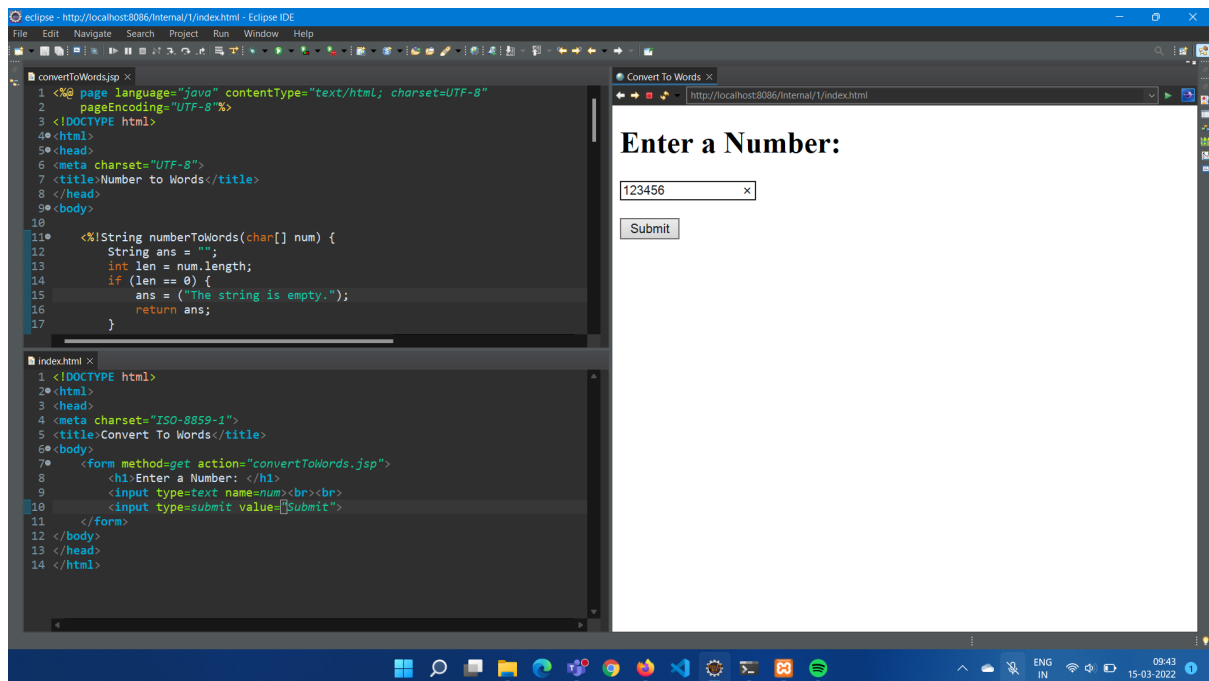
```
out.println(numberToWords(ch));
```

```
%>
```

```
</body>
```

```
</html>
```





2. Write a JSP program to create a registration form, which has the following fields: first name, last name, username, password, address, contact number, email id, etc.

- `index.html`

`<!DOCTYPE html>`


```
<html>
```

```
<head>
```

```
<meta charset="ISO-8859-1">
```

```
<title>Registration Form</title>
```

```
    <style>
```

```
    body{
```

```
    margin: 40px;
```

```
    background-color: blanchedalmond;
```

```
    display: flex;
```

```
    justify-content: center;
```

```
    }
```

```
    h1{
```

```
    background-color: yellow;
```

```
    padding: 20px;
```

```
    border-radius: 2rem;
```

```
    }
```

```
    .input-field{
```

```
    border-radius: 1rem;
```

```
    padding: 10px;
```

```
    margin-top: 5px;
```

```
    }
```

```
    label{
```

```
    font-size: 20px;
```

```
    }
```

```
    button{
```

```
padding: 5px;

margin: 10px;

width: 100px;

font-size: 20px;

background-color: aqua;

}

*/

</style>
```

```
</head>
```

```
<body>
```

```
    <div id="form-container">
```

```
        <h1>Registration Form</h1>
```

```
        <form name ="registration" id="registration" action="regForm.jsp">
```

```
            <label for="firstname">First Name:</label><br>
```

```
            <input class="input-field" type="text" name="firstname" id="firstname"
value="" required>
```

```
            <br>
```

```
            <br>
```

```
            <label for="lastname">Last Name:</label><br>
```

```
            <input class="input-field" type="text" name="lastname" id="lastname" value=""
required>
```

```
            <br>
```

```
            <br>
```

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

```
            <input class="input-field" type="email" name="email" id="email" value=""
required>
```

```
<br>

<br>

<label for="email">Mobile Number:</label><br>

<input class="input-field" type="text" name="mobile" id="mobile" value=""
required>

<br>

<br>

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

<textarea class="input-field" name="address" id="address" rows="6"
cols="35" required></textarea>

<br>

<br>

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

<input class="input-field" type="text" name="user" id="user" value=""
required>

<br>

<br>

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

<input class="input-field" type="password" name="password" id="password"
value="" required>

<br>

<br>

<button type="submit" value="Submit">Submit</button>

<button type="reset" id=btn>Clear</button>

</form>

</div>
```

```
</body>
```

```
</html>
```

- **regForm.jsp**

```
<%@ page language="java" contentType="text/html; charset=ISO-8859-1"
```

```
    pageEncoding="ISO-8859-1"%>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="ISO-8859-1">
```

```
<title>Registration Form</title>
```

```
</head>
```

```
<body>
```

```
    <%
```

```
        String fname = request.getParameter("firstname");
```

```
        String lname = request.getParameter("lastname");
```

```
        String email = request.getParameter("email");
```

```
        String mobile = request.getParameter("mobile");
```

```
        String address = request.getParameter("address");
```

```
        String username = request.getParameter("user");
```

```
    %>
```

```
<h1>Welcome
```

```
<% out.println(fname);%>
```

```
</h1>
```

```
<h2>You have been registered successfully!</h2>
```

<h3>Following are your details: </h3>

<%

out.println("First Name: " + fname + "</br></br>");

out.println("Last Name: " + lname + "</br></br>");

out.println("Email ID: " + email + "</br></br>");

out.println("Mobile Number: " + mobile + "</br></br>");

out.println("Address: " + address + "</br></br>");

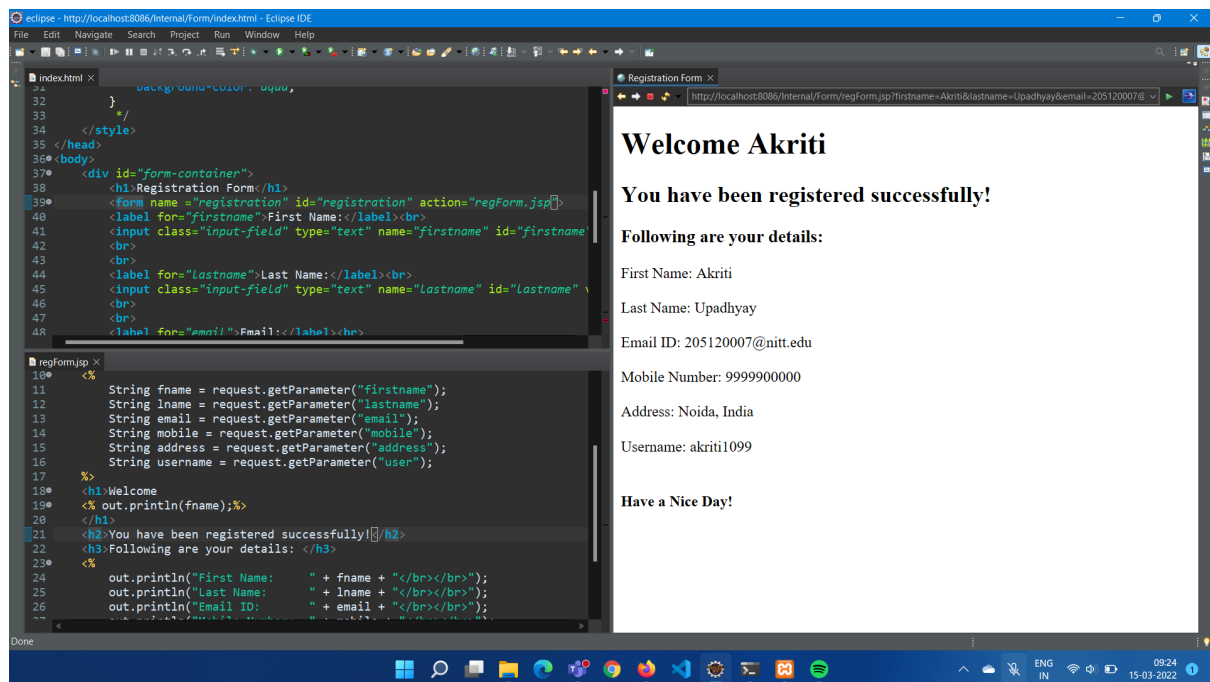
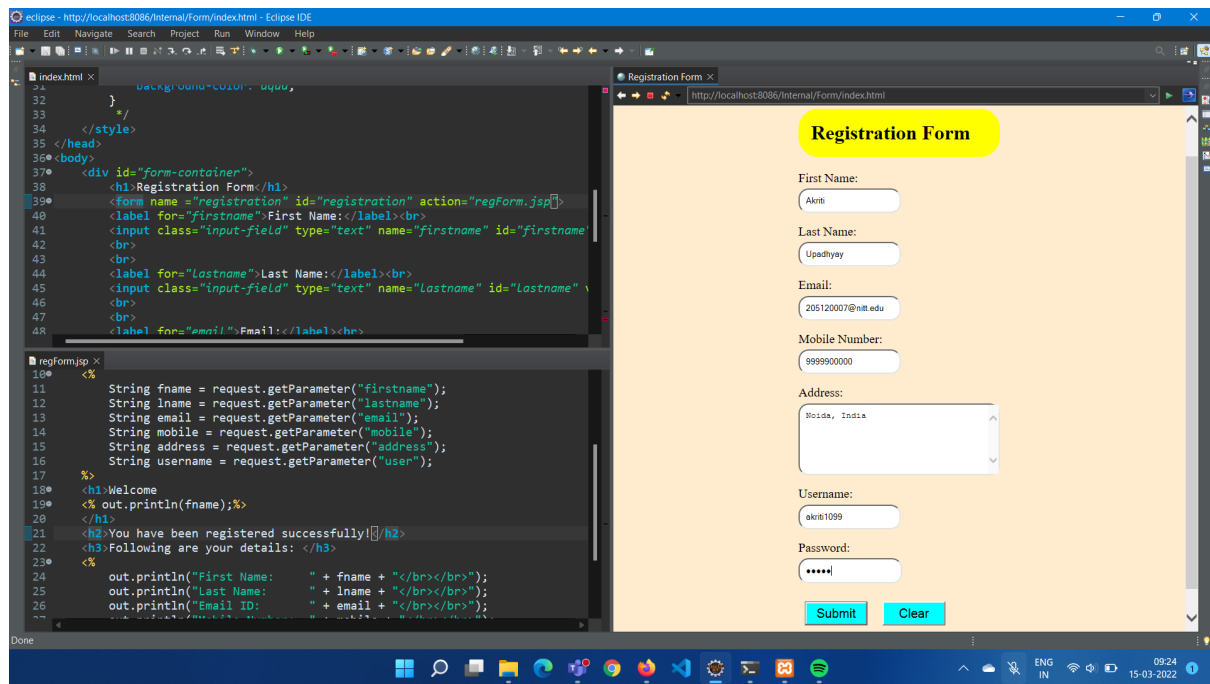
out.println("Username: " + username + "</br></br>");

%>

<h4>Have a Nice Day!</h4>

</body>

</html>



3. Write a PHP program to reverse a given string without using the library function.

- index.html

```

<!DOCTYPE html>

<html lang="en">

```

```

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>Reverse String</title>

</head>

<body>

    <form action="reverseStr.php" method="POST">

        <h3>Enter a string: </h3>

        <input type="text" name="string" /><br/><br/>

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

    </form>

</body>

</html>

```

- **reverseStr.php:**

```

<?php

function myStrRev($string)

{

    $string_length = strlen($string);

    $reversed_string = '';

    for ($i = ($string_length - 1); $i >= 0; $i--) {

        $reversed_string .= $string[$i];

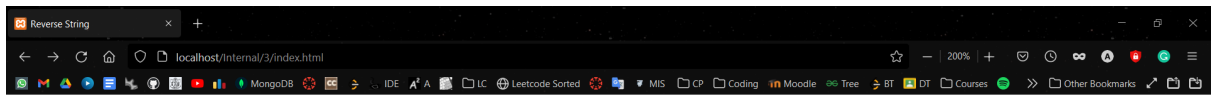
    }

}

```

```
        return $reversed_string;
    }

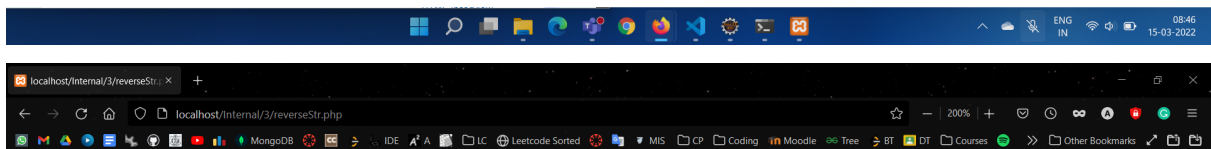
$string = $_POST["string"];
echo "The reverse of string " . $string . " is: " . myStrRev($string);
?>
```

Enter a string:

Web Technology Lab

Submit



The reverse of string Web Technology Lab is: baL ygonlhceT beW



4. Write a PHP program to print number triangles.

Example: enter the range= 6

1

121

12321

1234321

123454321

12345654321

- index.html:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>Number Triangle</title>

</head>

<body>

    <form action="triangle.php" method="POST">

        <h3>Enter the Range: </h3>

        <input type="text" name="num" /><br/><br/>

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

    </form>

</body>

</html>
```

- triangle.php:

```
<?php

$count = intval($_POST["num"]);

echo "<h4> Number Triangle: </h4>";

echo "<pre>";

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

    echo str_pad("", $count - $i, " ", STR_PAD_LEFT);

    for ($j = 1, $up = true; $j > 0; $up ? $j++ : $j--) {

        echo $j;

        if ($j == $i) {

            $up = false;

        }

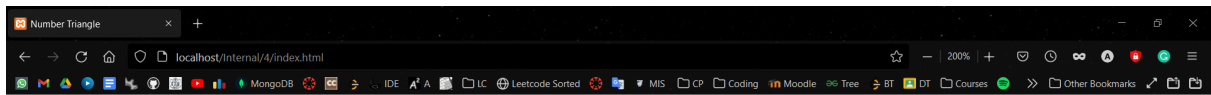
    }

    echo "<br>";

}

echo "</pre>";

?>
```



Enter the Range:

Submit



Number Triangle:

```
1
121
12321
1234321
123454321
12345654321
```



5. Write a PHP program to print the following star triangle.



- **index.html:**

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>Star Triangle</title>

</head>

<body>

    <form action="star.php" method="POST">

        <h3>Enter the Range: </h3>

        <input type="text" name="num" /><br/><br/>

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

    </form>

</body>

</html>
```

- **star.php:**

```
<?php {

    echo "<h4> Star Pattern: </h4>";

    // Upper Half Star

    $num = intval($_POST["num"]);

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

        for ($k = $num; $k > $i + 1; $k--) {

            echo "&nbsp;&nbsp;&nbsp;";

        }

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

            echo ("&nbsp;&nbsp;&nbsp; *");

        }

        echo "<br>";

    }

    // Lower Half Star

    for ($i = $num - 1; $i > 0; $i--) {

        for ($k = $num - 1; $k >= $i; $k--) {

            echo "&nbsp;&nbsp;&nbsp;";

        }

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

            echo ("&nbsp;&nbsp;&nbsp; *");

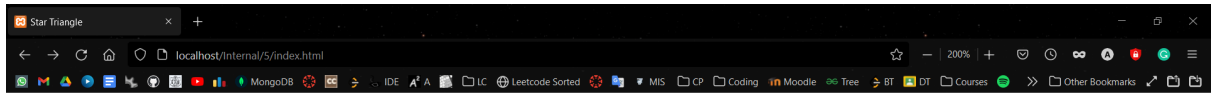
        }

        echo "<br>";

    }

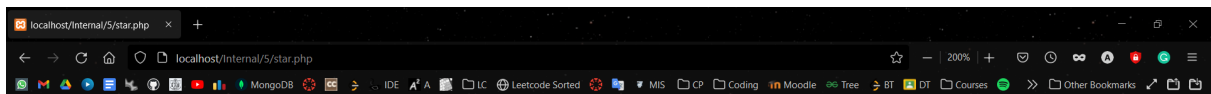
}
```

?>



Enter the Range:

Submit



Star Pattern:

```

      *
     * *
    * * *
   * * * *
  * * * * *
 * * * * * *
* * * * * * *
 * * * * * *
  * * * * *
   * * * *
    * * *
     * *
      *
```



X-X-X-X