Experiment No: 1

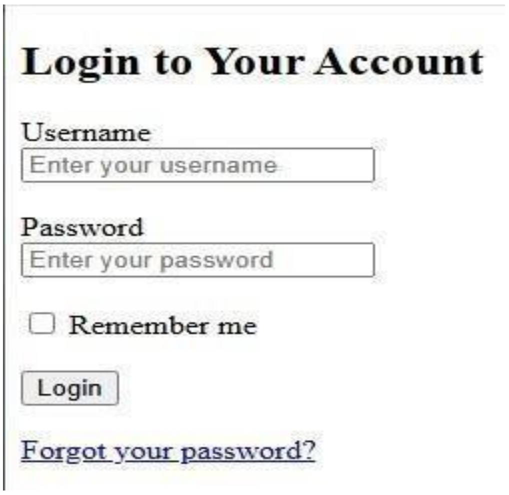
Q.Create html pages for website like login, registration and about us pages.

Program:

1.1 <u>login page</u>

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Enhanced Login Form</title>
</head>
<body>
<h2>Login to Your Account</h2
  <form action="/login" method="post">
    <label for="username">Username</label><br>
    <input      type="text"      id="username"

name="username"      placeholder="Enter your

username"      required      autofocus

    /><br><br>
    <label for="password">Password</label><br>
    <input      type="password"      id="password"

name="password"      placeholder="Enter your password"

required

    /><br><br>
    <label>
      <input type="checkbox" name="remember" />
      Remember me
    </label><br><br>
    <input type="submit" value="Login" /><br><br>
    <a href="#">Forgot your password?</a>
  </form>
</body>
</html>
```

Output:



Login to Your Account

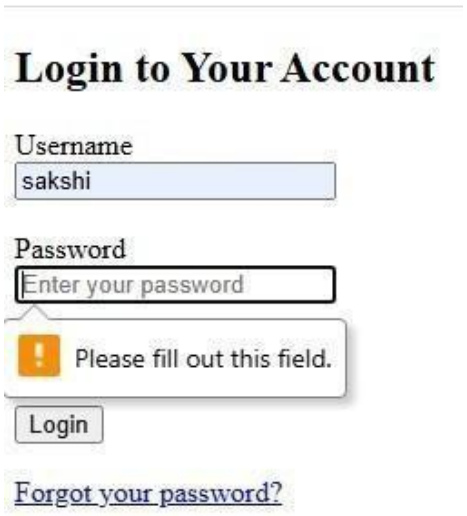
Username

Enter your username

Password

Enter your password

☐ Remember me



Login to Your Account

Username

sakshi

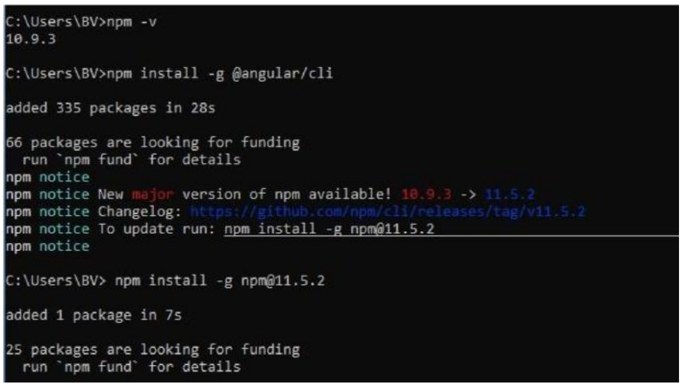
Password

Enter your password

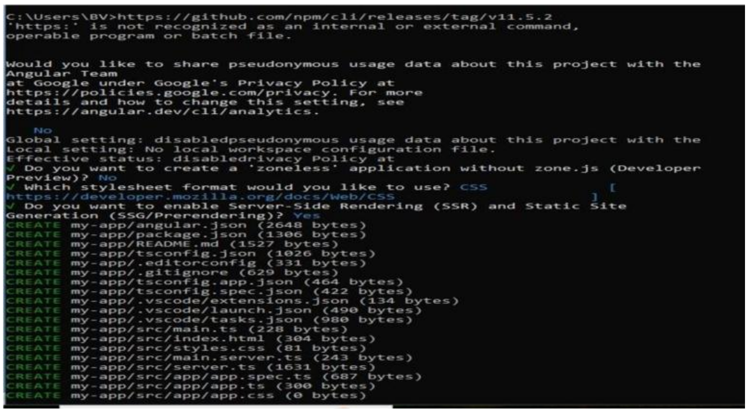
Please fill out this field.

Experiment No:5

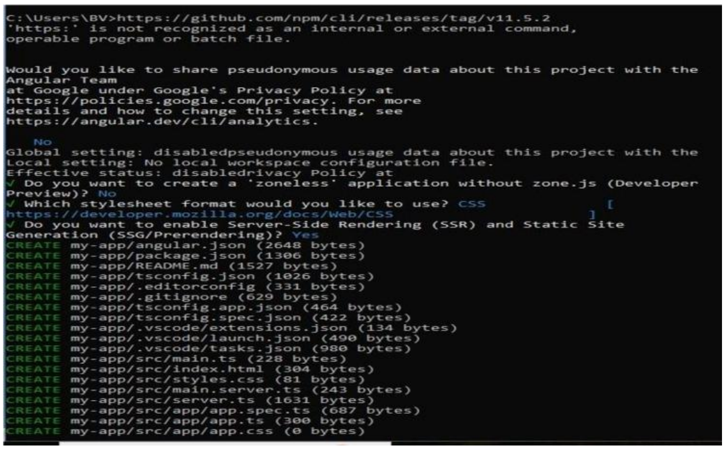
Q.Create a simple Testing Angular Application.



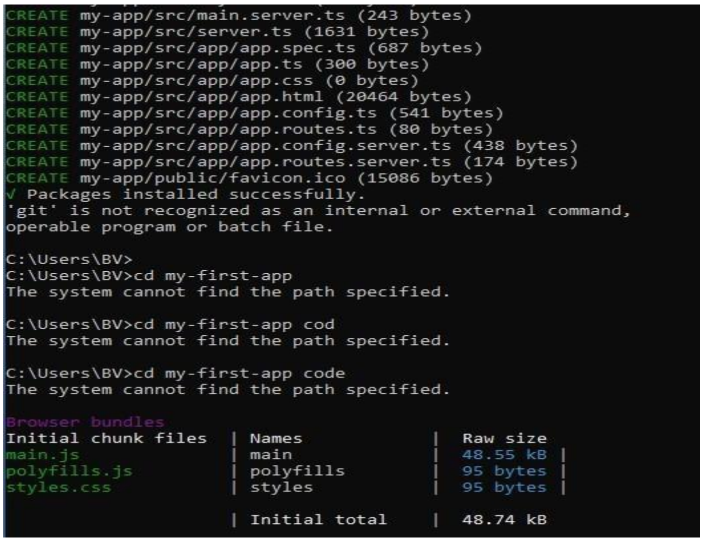
```
C:\Users\BV>npm -v
10.9.3

C:\Users\BV>npm install -g @angular/cli

added 335 packages in 28s

66 packages are looking for funding
  run `npm fund` for details
npm notice
npm notice New major version of npm available! 10.9.3 -> 11.5.2
npm notice Changelog: https://github.com/npm/cli/releases/tag/v11.5.2
npm notice To update run: npm install -g npm@11.5.2
npm notice

C:\Users\BV> npm install -g npm@11.5.2

added 1 package in 7s

25 packages are looking for funding
  run `npm fund` for details
```



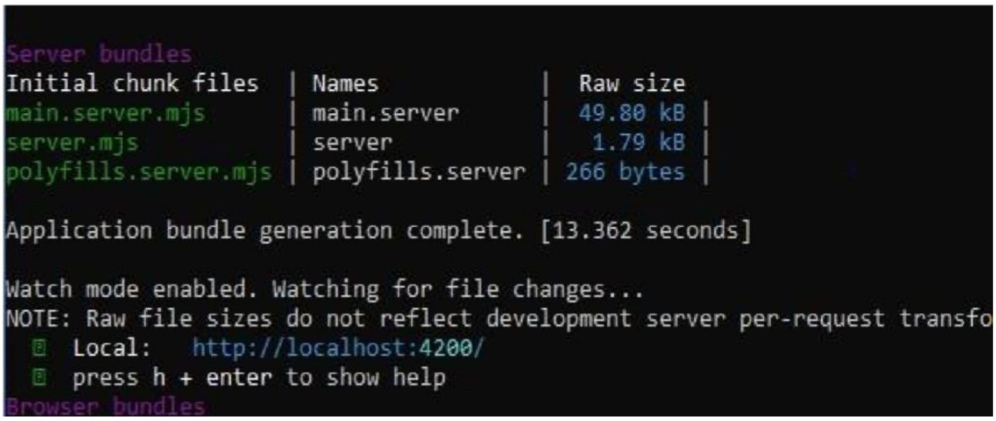
```
C:\Users\BV>https://github.com/npm/cli/releases/tag/v11.5.2
'https:' is not recognized as an internal or external command,
operable program or batch file.


Would you like to share pseudonymous usage data about this project with the
Angular Team
at Google under Google's Privacy Policy at
https://policies.google.com/privacy. For more
details and how to change this setting, see
https://angular.dev/cli/analytics.

   No
Global setting: disabledpseudonymous usage data about this project with the
Local setting: No local workspace configuration file.
Effective status: disabledrivacy Policy at
√ Do you want to create a 'zoneless' application without zone.js (Developer
Preview)? No
√ Which stylesheet format would you like to use? CSS             [
https://developer.mozilla.org/docs/Web/CSS                      ]
√ Do you want to enable Server-Side Rendering (SSR) and Static Site
Generation (SSG/Prerendering)? Yes
CREATE my-app/angular.json (2648 bytes)
CREATE my-app/package.json (1306 bytes)
CREATE my-app/README.md (1527 bytes)
CREATE my-app/tsconfig.json (1026 bytes)
CREATE my-app/.editorconfig (331 bytes)
CREATE my-app/.gitignore (629 bytes)
CREATE my-app/tsconfig.app.json (464 bytes)
CREATE my-app/tsconfig.spec.json (422 bytes)
CREATE my-app/.vscode/extensions.json (134 bytes)
CREATE my-app/.vscode/launch.json (490 bytes)
CREATE my-app/.vscode/tasks.json (980 bytes)
CREATE my-app/src/main.ts (228 bytes)
CREATE my-app/src/index.html (304 bytes)
CREATE my-app/src/styles.css (81 bytes)
CREATE my-app/src/main.server.ts (243 bytes)
CREATE my-app/src/server.ts (1631 bytes)
CREATE my-app/src/app/app.spec.ts (687 bytes)
CREATE my-app/src/app/app.ts (300 bytes)
CREATE my-app/src/app/app.css (0 bytes)
```



```
C:\Users\BV>https://github.com/npm/cli/releases/tag/v11.5.2
'https:' is not recognized as an internal or external command,
operable program or batch file.


Would you like to share pseudonymous usage data about this project with the
Angular Team
at Google under Google's Privacy Policy at
https://policies.google.com/privacy. For more
details and how to change this setting, see
https://angular.dev/cli/analytics.

   No
Global setting: disabledpseudonymous usage data about this project with the
Local setting: No local workspace configuration file.
Effective status: disabledrivacy Policy at
√ Do you want to create a 'zoneless' application without zone.js (Developer
Preview)? No
√ Which stylesheet format would you like to use? CSS             [
https://developer.mozilla.org/docs/Web/CSS                      ]
√ Do you want to enable Server-Side Rendering (SSR) and Static Site
Generation (SSG/Prerendering)? Yes
CREATE my-app/angular.json (2648 bytes)
CREATE my-app/package.json (1306 bytes)
CREATE my-app/README.md (1527 bytes)
CREATE my-app/tsconfig.json (1026 bytes)
CREATE my-app/.editorconfig (331 bytes)
CREATE my-app/.gitignore (629 bytes)
CREATE my-app/tsconfig.app.json (464 bytes)
CREATE my-app/tsconfig.spec.json (422 bytes)
CREATE my-app/.vscode/extensions.json (134 bytes)
CREATE my-app/.vscode/launch.json (490 bytes)
CREATE my-app/.vscode/tasks.json (980 bytes)
CREATE my-app/src/main.ts (228 bytes)
CREATE my-app/src/index.html (304 bytes)
CREATE my-app/src/styles.css (81 bytes)
CREATE my-app/src/main.server.ts (243 bytes)
CREATE my-app/src/server.ts (1631 bytes)
CREATE my-app/src/app/app.spec.ts (687 bytes)
CREATE my-app/src/app/app.ts (300 bytes)
CREATE my-app/src/app/app.css (0 bytes)
```

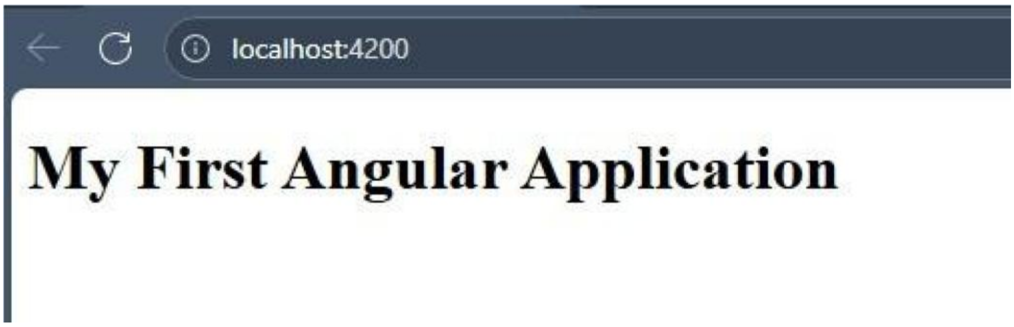


```
CREATE my-app/src/main.server.ts (243 bytes)
CREATE my-app/src/server.ts (1631 bytes)
CREATE my-app/src/app/app.spec.ts (687 bytes)
CREATE my-app/src/app/app.ts (300 bytes)
CREATE my-app/src/app/app.css (0 bytes)
CREATE my-app/src/app/app.html (20464 bytes)
CREATE my-app/src/app/app.config.ts (541 bytes)
CREATE my-app/src/app/app.routes.ts (80 bytes)
CREATE my-app/src/app/app.config.server.ts (438 bytes)
CREATE my-app/src/app/app.routes.server.ts (174 bytes)
CREATE my-app/public/favicon.ico (15086 bytes)
√ Packages installed successfully.
'git' is not recognized as an internal or external command,
operable program or batch file.

C:\Users\BV>
C:\Users\BV>cd my-first-app
The system cannot find the path specified.

C:\Users\BV>cd my-first-app cod
The system cannot find the path specified.

C:\Users\BV>cd my-first-app code
The system cannot find the path specified.

Browser bundles
Initial chunk files  | Names          |  Raw size
main.js              | main           |  48.55 kB |
polyfills.js         | polyfills      |  95 bytes |
styles.css           | styles         |  95 bytes |

                     | Initial total  |  48.74 kB
```



```
Server bundles
Initial chunk files   | Names             |  Raw size
main.server.mjs       | main.server       |  49.80 kB |
server.mjs            | server            |   1.79 kB |
polyfills.server.mjs  | polyfills.server  | 266 bytes |

Application bundle generation complete. [13.362 seconds]

Watch mode enabled. Watching for file changes...
NOTE: Raw file sizes do not reflect development server per-request transfo
  ▯  Local:   http://localhost:4200/
  ▯  press h + enter to show help
Browser bundles
```

```
//HTML Code

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Document</title>

</head>

<body>

  <h1>My First Angular Application</h1>

</body>

</html>
```



My First Angular Application

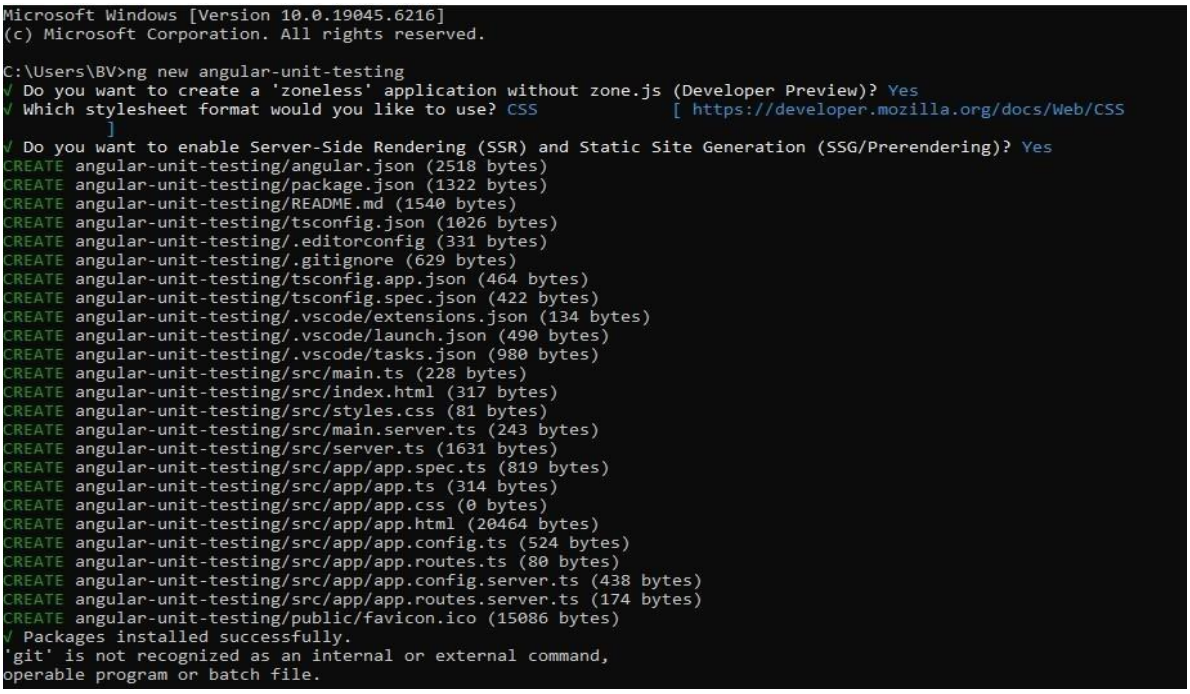
Experiment No:6

Q.Write a program demonstrating node.js application.

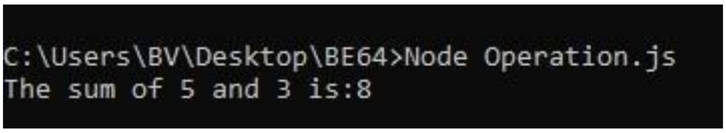
const num1=5; const num2=3; const sum=num1+num2;

console.log('The sum of '+num1+' and '+num2+' is:' +sum);

Output:



```
Microsoft Windows [Version 10.0.19045.6216]
(c) Microsoft Corporation. All rights reserved.

C:\Users\BV>ng new angular-unit-testing
√ Do you want to create a 'zoneless' application without zone.js (Developer Preview)? Yes
√ Which stylesheet format would you like to use? CSS             [ https://developer.mozilla.org/docs/Web/CSS
          ]
√ Do you want to enable Server-Side Rendering (SSR) and Static Site Generation (SSG/Prerendering)? Yes
CREATE angular-unit-testing/angular.json (2518 bytes)
CREATE angular-unit-testing/package.json (1322 bytes)
CREATE angular-unit-testing/README.md (1540 bytes)
CREATE angular-unit-testing/tsconfig.json (1026 bytes)
CREATE angular-unit-testing/.editorconfig (331 bytes)
CREATE angular-unit-testing/.gitignore (629 bytes)
CREATE angular-unit-testing/tsconfig.app.json (464 bytes)
CREATE angular-unit-testing/tsconfig.spec.json (422 bytes)
CREATE angular-unit-testing/.vscode/extensions.json (134 bytes)
CREATE angular-unit-testing/.vscode/launch.json (490 bytes)
CREATE angular-unit-testing/.vscode/tasks.json (980 bytes)
CREATE angular-unit-testing/src/main.ts (228 bytes)
CREATE angular-unit-testing/src/index.html (317 bytes)
CREATE angular-unit-testing/src/styles.css (81 bytes)
CREATE angular-unit-testing/src/main.server.ts (243 bytes)
CREATE angular-unit-testing/src/server.ts (1631 bytes)
CREATE angular-unit-testing/src/app/app.spec.ts (819 bytes)
CREATE angular-unit-testing/src/app/app.ts (314 bytes)
CREATE angular-unit-testing/src/app/app.css (0 bytes)
CREATE angular-unit-testing/src/app/app.html (20464 bytes)
CREATE angular-unit-testing/src/app/app.config.ts (524 bytes)
CREATE angular-unit-testing/src/app/app.routes.ts (80 bytes)
CREATE angular-unit-testing/src/app/app.config.server.ts (438 bytes)
CREATE angular-unit-testing/src/app/app.routes.server.ts (174 bytes)
CREATE angular-unit-testing/public/favicon.ico (15086 bytes)
√ Packages installed successfully.
'git' is not recognized as an internal or external command,
operable program or batch file.
```



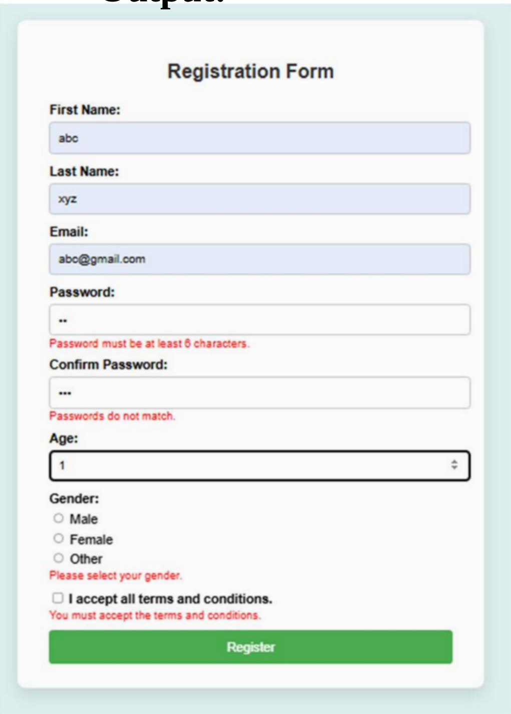
```
C:\Users\BV\Desktop\BE64>Node Operation.js
The sum of 5 and 3 is:8
```

Experiment No:3

Q. Write a program to demonstrate javascript functions and different validations.
Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
        <meta charset="UTF-8">
                <title>Registration Form</title>
  <style>

body {

font-family: Arial, sansserif;      background: #e0f2f1;      display: flex;      justify-content: center;

        alignitems: center;  height: 100vh;      margin: 0;

}

form {      background: #fff;   padding: 30px 40px;    border-radius: 10px;     box-shadow: 0 8px 20px rgba(0, 0, 0, 0.1);
        width: 100%;  max-width: 500px;
   }

h2 {      text-align: center;      color: #333;margin-bottom: 25px;      }

 label {      display: block;    margin-bottom: 6px;      fontweight: bold;      }

 input[type="text"],     input[type="password"],     input[type="email"],     input[type="number"]

{     width: 100%;      padding: 10px;      marginbottom: 12px;      border: 1px solid #ccc;      border-radius: 5px;

fontsize: 15px;     }

.gender-group {      margin-bottom: 15px;      }
.gender-group label {      font-weight: normal;      margin-right: 15px;      }
.terms {      margin-bottom: 15px;      }
input[type="submit"] {      background-color: #4CAF50;      color: white;      padding: 12px;      width: 100%;

        border: none;      borderradius: 5px;      font-size: 16px;      cursor: pointer;    }

input[type="submit"]:hover {      background-color: #45a049;      }
.error {      color: red;      fontsize: 14px;      margin-top: -10px;      margin-bottom: 10px;      }
  </style>
</head>
<body>
  <form id="registrationForm" onsubmit="return validateForm()">
    <h2>Registration Form</h2>
    <label for="firstname">First Name:</label>
    <input type="text" id="firstname" name="firstname">
    <div class="error" id="firstnameError"></div>
    <label for="lastname">Last Name:</label>
    <input type="text" id="lastname" name="lastname">
    <div class="error" id="lastnameError"></div>
    <label for="email">Email:</label>
    <input type="email" id="email" name="email">
    <div class="error" id="emailError"></div>
    <label for="password">Password:</label>
    <input type="password" id="password" name="password">
    <div class="error" id="passwordError"></div>
    <label for="confirmPassword">Confirm Password:</label>
    <input type="password" id="confirmPassword" name="confirmPassword">
    <div class="error" id="confirmPasswordError"></div>
    <label for="age">Age:</label>
    <input type="number" id="age" name="age" min="1">
    <div class="error" id="ageError"></div>
    <label>Gender:</label>
    <div class="gender-group">
      <label><input type="radio" name="gender" value="male"> Male</label>       <label><input type="radio"
name="gender" value="female"> Female</label>
      <label><input type="radio" name="gender" value="other"> Other</label>
    </div>
    <div class="error" id="genderError"></div>
    <div class="terms">
      <label><input type="checkbox" id="terms"> I accept all terms and conditions.</label>     </div>
    <div class="error" id="termsError"></div>
    <input type="submit" value="Register">
  </form>   <script>     function validateForm() {      let isValid = true;      //
Clear errors      document.querySelectorAll('.error').forEach(el => el.innerText
= '');
      // Form values

const firstname = document.getElementById('firstname').value.trim();

const lastname = document.getElementById('lastname').value.trim();

const email = document.getElementById('email').value.trim();

const password = document.getElementById('password').value;

const confirmPassword = document.getElementById('confirmPassword').value;

const age = document.getElementById('age').value;

const genderChecked = document.querySelector('input[name="gender"]:checked');

const termsChecked = document.getElementById('terms').checked;

      // Validations

if (firstname === '') {

document.getElementById('firstnameError').innerText = 'First name is required.';
isValid = false;

     }      if (lastname === '') {
document.getElementById('last nameError').innerText = 'Last name is required.';

isValid = false;

     }      if (email === '') {
document.getElementById('emailError').innerText = 'Email is required.';
isValid = false;
     }     else      if          (!/^[^\s@]+@[^\s@]+\.[^\s@]+$/.test(email))            {
document.getElementById('emailError').innerText = 'Invalid email format.';

isValid = false;

     }  if (password.length < 6) {
       document.getElementById('passwordError').innerText = 'Password must be at least 6 characters.';

isValid = false;

     }
     if (confirmPassword !== password) {
       document.getElementById('confirmPasswordError').innerText     = 'Passwords do not match.';

isValid = false;

     }  if (age === '' || isNaN(age) || Number(age) <= 0) {
document.getElementById('ageError').innerText = 'Please enter a valid age.';
isValid = false;
     }       if (!genderChecked) {
document.getElementById('genderError').innerText = 'Please select your gender.';
isValid = false;
     }       if (!termsChecked) {
       document.getElementById('termsError').innerText = 'You must accept the terms and conditions.';
isValid = false;
     }      return isValid;     }
  </script>
</body>
</html>
```

Output:



Registration Form

First Name: abc

Last Name: xyz

Email: abc@gmail.com

Password: ••

Password must be at least 6 characters.

Confirm Password: •••

Passwords do not match.

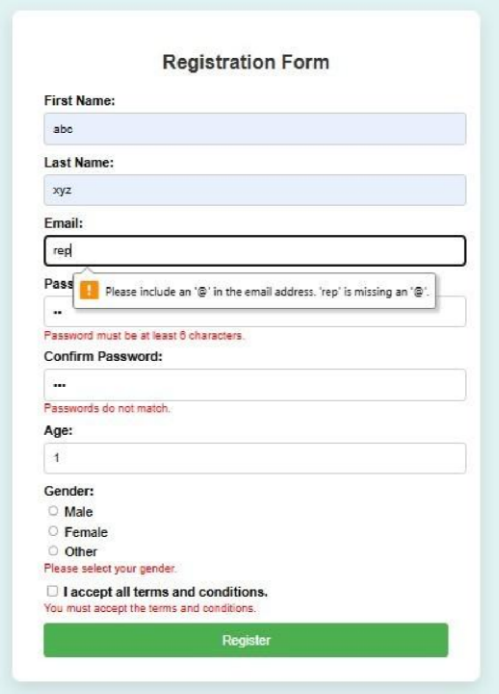
Age: 1

Gender:
○ Male
○ Female
○ Other

Please select your gender.

□ I accept all terms and conditions.

You must accept the terms and conditions.



Registration Form

First Name: abc

Last Name: xyz

Email: rep

Please include an '@' in the email address. 'rep' is missing an '@'.

Password: ••

Password must be at least 6 characters.

Confirm Password: •••

Passwords do not match.

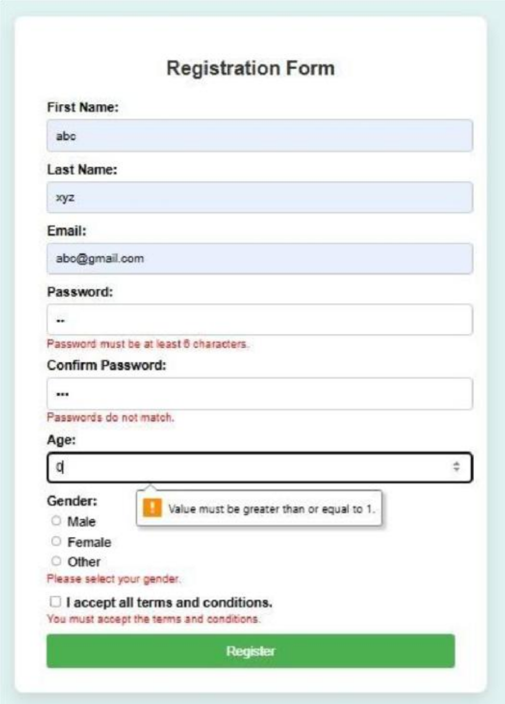
Age: 1

Gender:
○ Male
○ Female
○ Other

Please select your gender.

□ I accept all terms and conditions.

You must accept the terms and conditions.



Registration Form

First Name: abc

Last Name: xyz

Email: abc@gmail.com

Password: ••

Password must be at least 6 characters.

Confirm Password: •••

Passwords do not match.

Age: 0

Value must be greater than or equal to 1.

Gender:
○ Male
○ Female
○ Other

Please select your gender.

□ I accept all terms and conditions.

You must accept the terms and conditions.

Experiment No:2

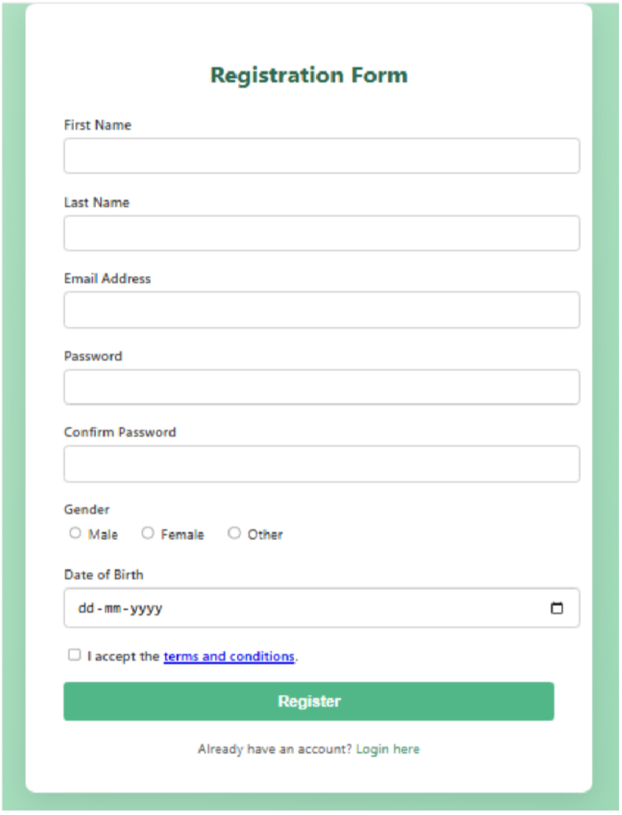
Q.Design a web page using css: apply css to pages crated in first experiment.

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
  <title>Registration Form</title>
  <style>
    /* Background */
body {       margin: 0;       padding: 0;       font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
background: linear-gradient(135deg, #b7e4c7 0%, #95d5b2 100%);
display: flex;       justify-content: center;       align-items: flex-start;       min-height: 100vh;
    }
    /* Outer title */
.page-title {       width: 100%;       text-align: center;       margin-top: 40px;       margin-bottom: 20px; font-
size: 32px; font-weight: bold; color: #2d6a4f;

    }
    /* Container */
.container {       background: white;       padding: 40px;       border-radius: 10px;       box-shadow: 0 10px 30px
rgba(0,0,0,0.1);       width: 100%;       max-width: 500px;       margin-bottom: 40px; }
h2 {       text-align: center;       color: #2d6a4f;       margin-bottom: 30px; }
label {       display: block;       margin-bottom: 6px;       color: #333;       font-weight: 500;       font-size: 14px;}
input[type="text"],     input[type="email"],     input[type="password"],     input[type="date"] {

width: 100%; padding: 10px 12px; margin-bottom: 20px; border: 1px solid #ccc; border-radius: 5px;
font-size: 15px;       transition: border 0.3s ease, box-shadow 0.3s ease; }
input:focus { border-color: #52b788; box-shadow: 0 0 5px rgba(82, 183, 136, 0.4); outline: none;     }
    .gender-options {       margin-bottom: 20px;
    }
    .gender-options label {       display: inline-block;       margin-right: 15px;       font-weight: normal;
font-size: 14px;}
```

```
    .terms {      margin-bottom: 20px;      font-size: 13px; }

    input[type="submit"] {      background-color: #52b788;      color: white;      padding: 12px;
      width: 100%; border: none; border-radius: 5px; font-size: 16px; font-weight: bold;      cursor: pointer;
transition: background-color 0.3s ease;

    }
    input[type="submit"]:hover {      background-color: #40916c;
    }    .footer {      text-align: center;      margin-top: 20px;      font-size: 14px;      color: #555;
    }
    .footer a {      color: #40916c;      text-decoration: none;
    }
    .footer a:hover {      text-decoration: underline;
    }

  </style>

</head>

<body>

  <div class="container">

    <h2>Registration Form</h2>

    <form action="/submit" method="post"> <label for="firstname">First Name</label>

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

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

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

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

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

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

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

      <label for="confirm-password">Confirm Password</label>

      <input type="password" id="confirm-password" name="confirm_password" required />

      <label>Gender</label>

      <div class="gender-options">

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

        <label><input type="radio" name="gender" value="female" /> Female</label>

        <label><input type="radio" name="gender" value="other" /> Other</label>      </div>

      <label for="dob">Date of Birth</label>

      <input type="date" id="dob" name="dob" required />
      <div class="terms">

        <label>

          <input type="checkbox" name="terms" required />

          I accept the <a href="#">terms and conditions</a>.

        </label>

      </div>

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

    </form>

    <div class="footer">

      Already have an account? <a href="/login">Login here</a>

    </div>

  </div>
</body>

</html>
```

Output:



Registration Form

First Name

Last Name

Email Address

Password

Confirm Password

Gender

○ Male ○ Female ○ Other

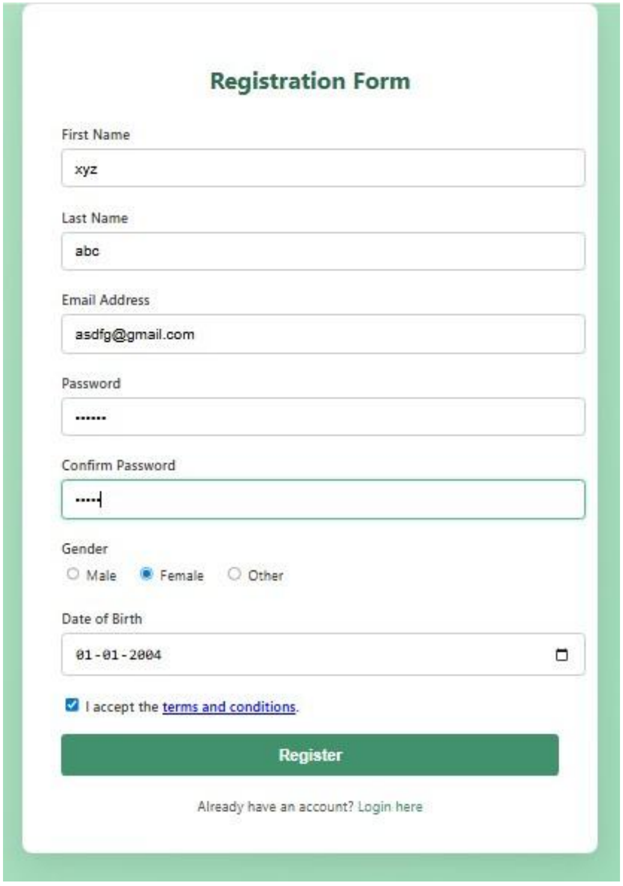
Date of Birth

dd-mm-yyyy

□ I accept the terms and conditions.

Register

Already have an account? Login here



Registration Form

First Name

xyz

Last Name

abc

Email Address

asdfg@gmail.com

Password

••••••

Confirm Password

•••••

Gender

○ Male ● Female ○ Other

Date of Birth

01-01-2004

☑ I accept the terms and conditions.

Register

Already have an account? Login here

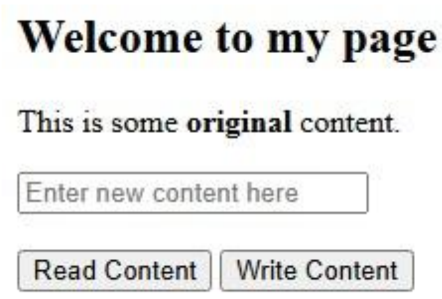
Experiment No:4

Q. Write a program to read and write Html contents with JQuery.

Program:

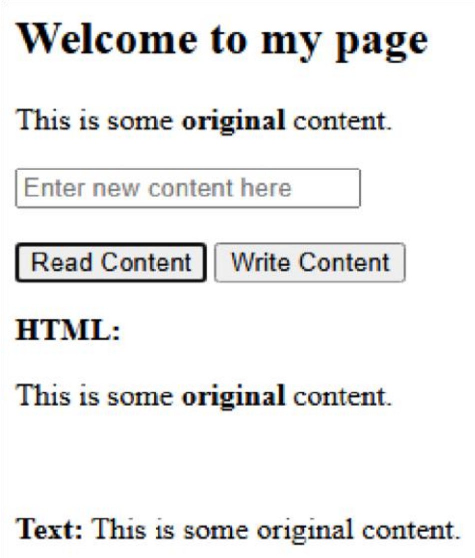
```
<!DOCTYPE html>

<html>

<head>

    <title>Read and Write HTML with jQuery</title>

    <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>

</head>

<body>

    <h2 id="heading">Welcome to my page</h2>

    <div id="content">

        <p>This is some <b>original</b> content.</p>

    </div>

    <input type="text" id="inputtext" placeholder="Enter new content here">

    <br><br>

    <button id="readBtn">Read Content</button>

    <button id="writeBtn">Write Content</button>

    <p id="output"></p>

    <script>

        $(document).ready(function() {             $("#readBtn").click(function() {                 let htmlData =
$("#content").html();                 let textData = $("#content").text();

                $("#output").html("<b>HTML:</b> " + htmlData + "<br><br><b>Text:</b> " + textData);

            });

            $("#writeBtn").click(function() {                 let newContent = $("#inputtext").val();

                $("#content").html(newContent);
                $("#output").html("<i>Content updated</i>");

            });

        });

    </script>

</body>

</html>
```

Output:


Welcome to my page

This is some **original** content.

Enter new content here


Welcome to my page

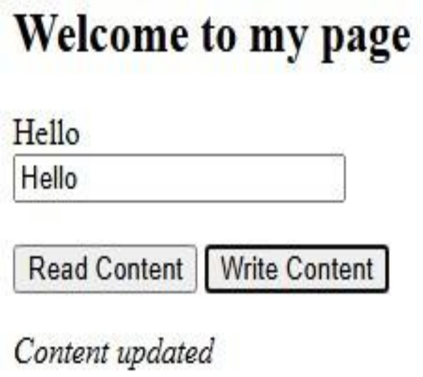
This is some **original** content.

Enter new content here

HTML:

This is some **original** content.

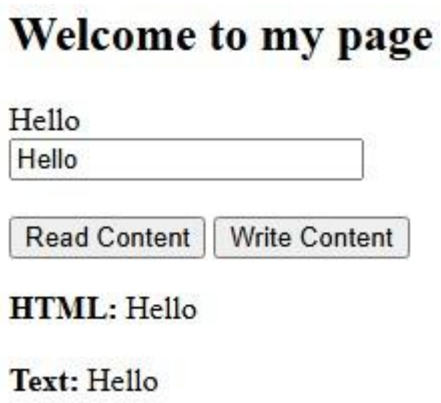
Text: This is some original content.


Welcome to my page

Hello

Hello

Content updated


Welcome to my page

Hello

Hello

HTML: Hello

Text: Hello

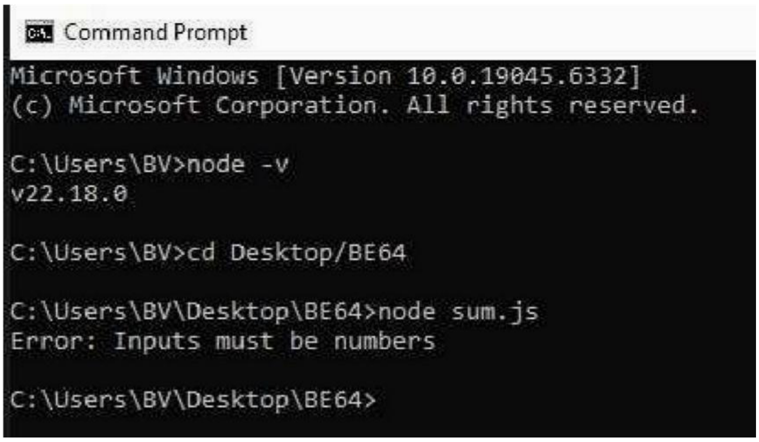
Experiment No. 7

Q. Write a program to handle the error in Nodejs.

Program:

```
try { const num I = 5:const num2 = 'a';
// invalid number
 if (typeofnuml !== 'number' I l typeofnum2 !== 'number')
{
throw new Error('lnputs must be numbers');
  console.log(numl + num2);
}
catch   (err)     {
  console.error('Error:', err.message); }
```

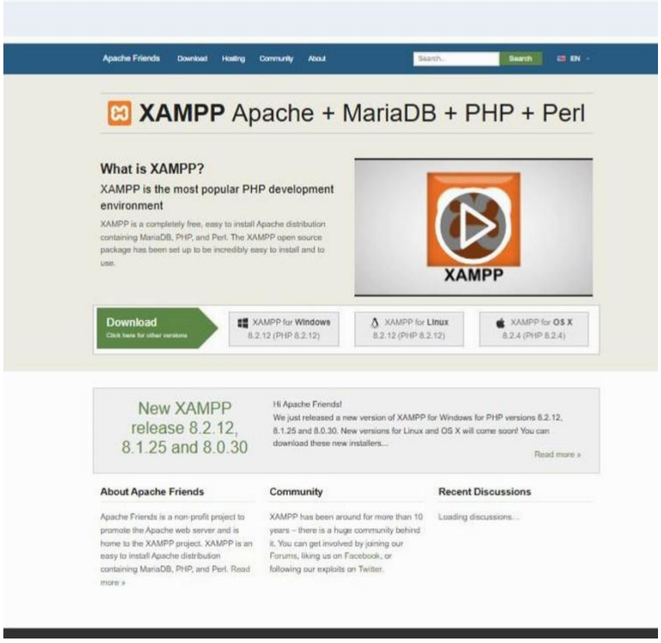
Output:



```
Microsoft Windows [Version 10.0.19045.6332]
(c) Microsoft Corporation. All rights reserved.

C:\Users\BV>node -v
v22.18.0

C:\Users\BV>cd Desktop/BE64

C:\Users\BV\Desktop\BE64>node sum.js
Error: Inputs must be numbers

C:\Users\BV\Desktop\BE64>
```

Experiment No : 8

Q. Installation of XAMPP.



XAMPP Apache + MariaDB + PHP + Perl

What is XAMPP?

XAMPP is the most popular PHP development environment

XAMPP is a completely free, easy to install Apache distribution containing MariaDB, PHP, and Perl. The XAMPP open source package has been set up to be incredibly easy to install and to use.

New XAMPP release 8.2.12, 8.1.25 and 8.0.30

Hi Apache Friends!
We just released a new version of XAMPP for Windows for PHP versions 8.2.12, 8.1.25 and 8.0.30. New versions for Linux and OS X will come soon! You can download these new installers...

About Apache Friends

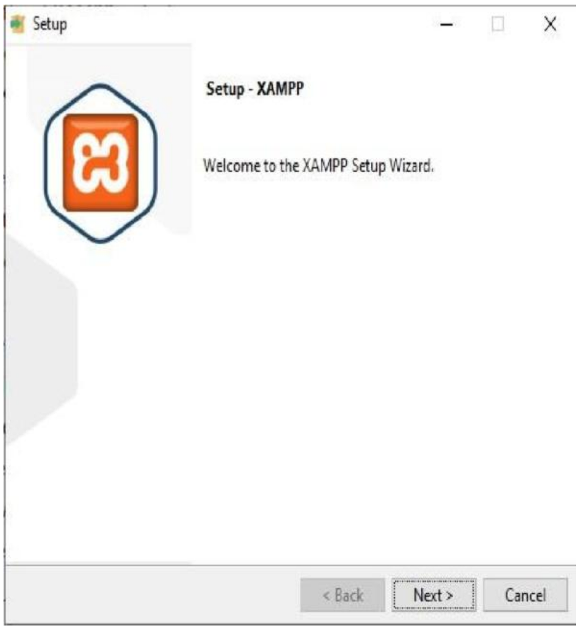
Apache Friends is a non-profit project to promote the Apache web server and is home to the XAMPP project. XAMPP is an easy to install Apache distribution containing MariaDB, PHP, and Perl. Read more »

Community

XAMPP has been around for more than 10 years – there is a huge community behind it. You can get involved by joining our Forums, liking us on Facebook, or following our exploits on Twitter.

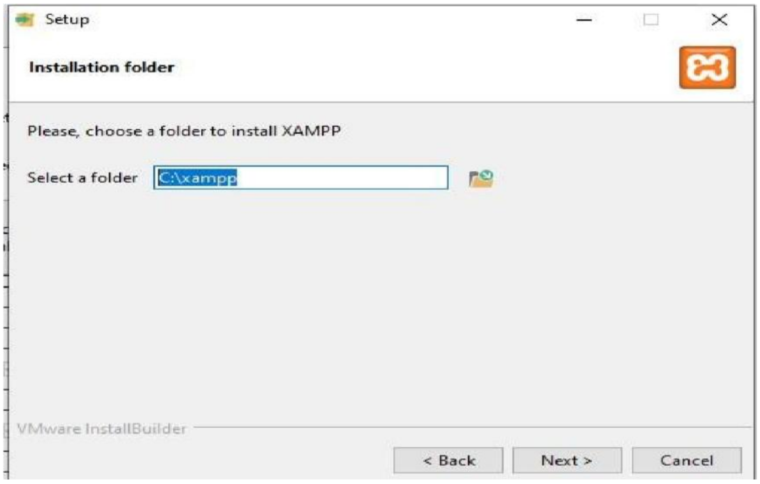
Recent Discussions

Loading discussions...



Setup - XAMPP

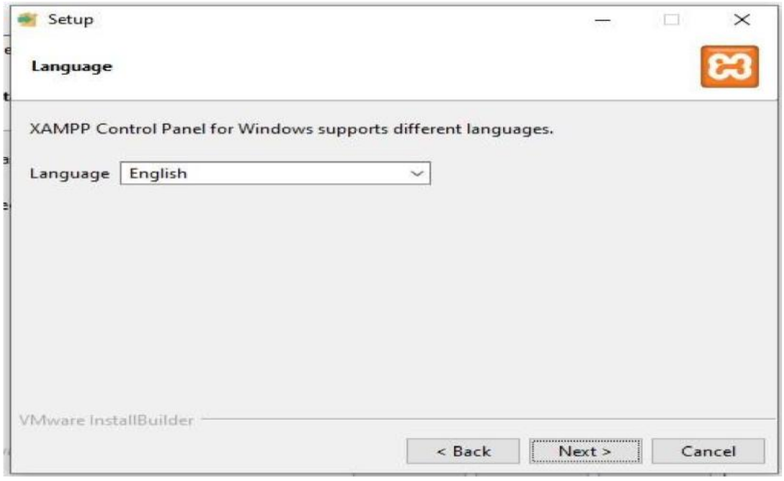
Welcome to the XAMPP Setup Wizard.



Installation folder

Please, choose a folder to install XAMPP

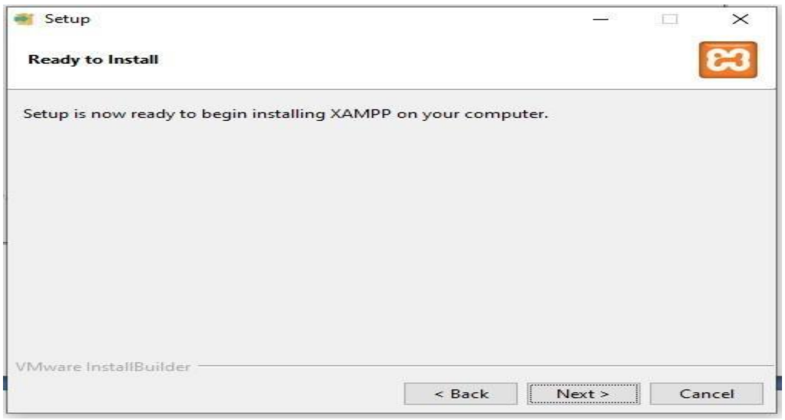
Select a folder C:\xampp



Language

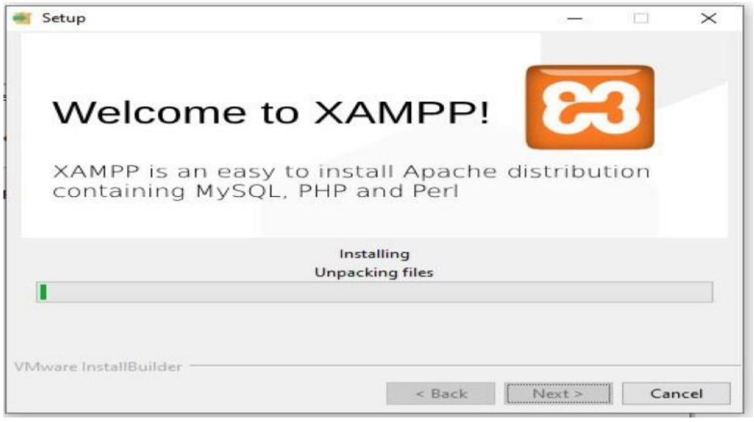
XAMPP Control Panel for Windows supports different languages.

Language English



Ready to Install

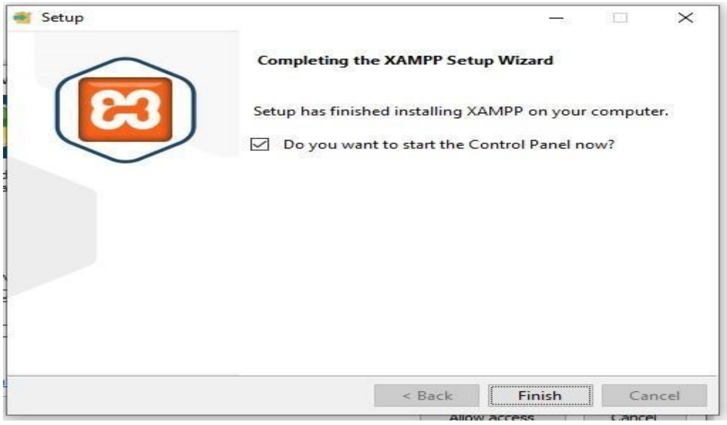
Setup is now ready to begin installing XAMPP on your computer.



Welcome to XAMPP!

XAMPP is an easy to install Apache distribution containing MySQL, PHP and Perl

Installing
Unpacking files

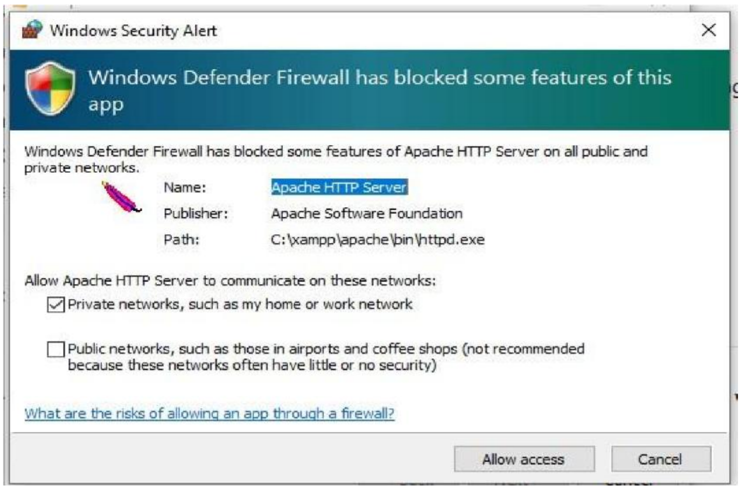


Setup

Completing the XAMPP Setup Wizard

Setup has finished installing XAMPP on your computer.

☑ Do you want to start the Control Panel now?



Windows Security Alert

Windows Defender Firewall has blocked some features of this app

Windows Defender Firewall has blocked some features of Apache HTTP Server on all public and private networks.

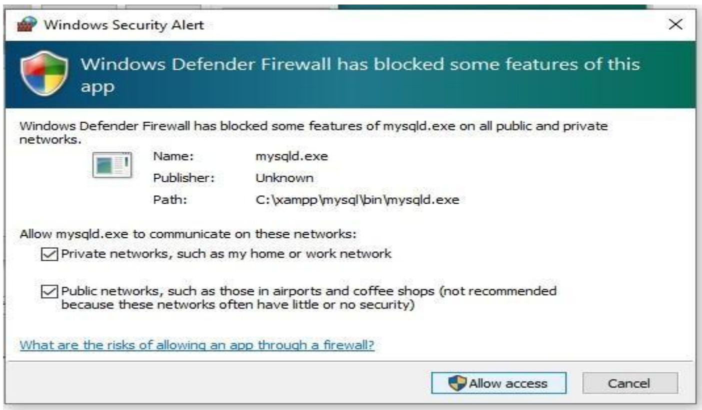
Name: Apache HTTP Server
Publisher: Apache Software Foundation
Path: C:\xampp\apache\bin\httpd.exe

Allow Apache HTTP Server to communicate on these networks:

☑ Private networks, such as my home or work network

☐ Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)

What are the risks of allowing an app through a firewall?



Windows Security Alert

Windows Defender Firewall has blocked some features of this app

Windows Defender Firewall has blocked some features of mysqld.exe on all public and private networks.

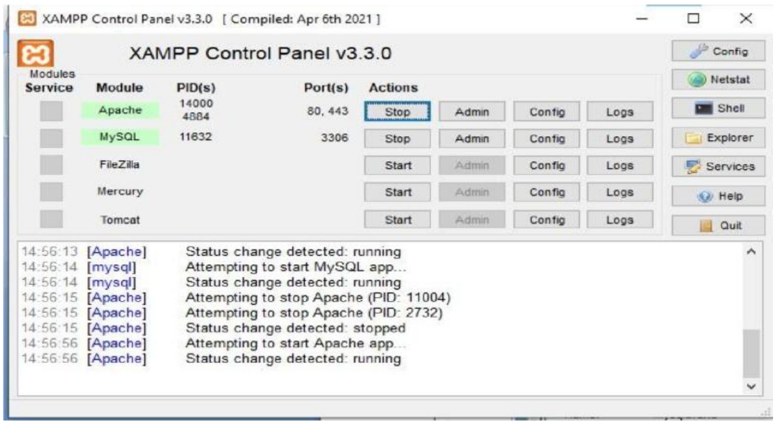
Name: mysqld.exe
Publisher: Unknown
Path: C:\xampp\mysql\bin\mysqld.exe

Allow mysqld.exe to communicate on these networks:

☑ Private networks, such as my home or work network

☑ Public networks, such as those in airports and coffee shops (not recommended because these networks often have little or no security)

What are the risks of allowing an app through a firewall?

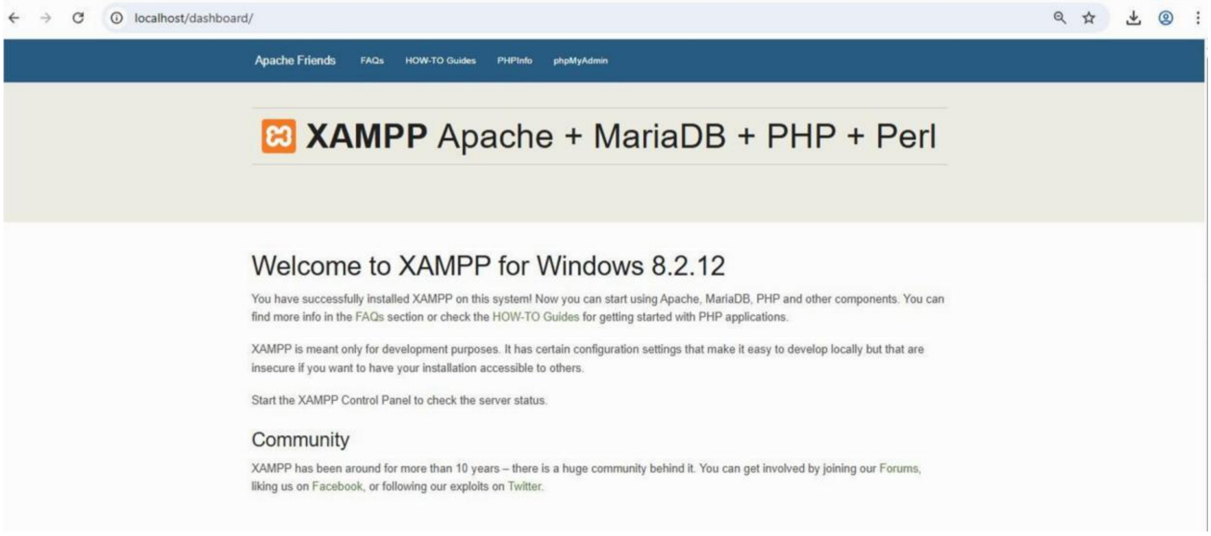


XAMPP Control Panel v3.3.0 [Compiled: Apr 6th 2021]

XAMPP Control Panel v3.3.0

```
Modules
Service  Module     PID(s)   Port(s)   Actions
         Apache     14000    80, 443   Stop   Admin  Config  Logs
                    4884
         MySQL      11632    3306      Stop   Admin  Config  Logs
         FileZilla                     Start  Admin  Config  Logs
         Mercury                       Start  Admin  Config  Logs
         Tomcat                        Start  Admin  Config  Logs
```

```
14:56:13  [Apache]    Status change detected: running
14:56:14  [mysql]     Attempting to start MySQL app...
14:56:14  [mysql]     Status change detected: running
14:56:15  [Apache]    Attempting to stop Apache (PID: 11004)
14:56:15  [Apache]    Attempting to stop Apache (PID: 2732)
14:56:15  [Apache]    Status change detected: stopped
14:56:56  [Apache]    Attempting to start Apache app...
14:56:56  [Apache]    Status change detected: running
```



localhost/dashboard/

XAMPP Apache + MariaDB + PHP + Perl

Welcome to XAMPP for Windows 8.2.12

You have successfully installed XAMPP on this system! Now you can start using Apache, MariaDB, PHP and other components. You can find more info in the FAQs section or check the HOW-TO Guides for getting started with PHP applications.

XAMPP is meant only for development purposes. It has certain configuration settings that make it easy to develop locally but that are insecure if you want to have your installation accessible to others.

Start the XAMPP Control Panel to check the server status.

Community

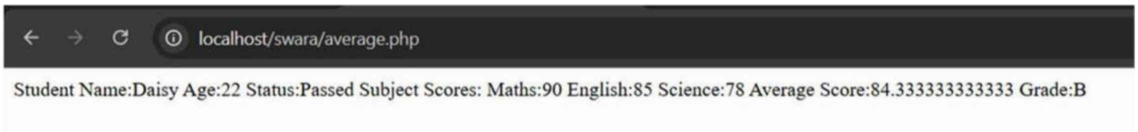
XAMPP has been around for more than 10 years – there is a huge community behind it. You can get involved by joining our Forums, liking us on Facebook, or following our exploits on Twitter.

Experiment No:9

Q. Program based on PHP variables, expressions ,array and control structures.

```
<?php
//1.Variables
$name="Daisy";
$Age=22;
$score=92;
//2.Expression
$passed=($score>=50);
//3.Array
$subjects=array("Maths"=>90,"English"=>85,"Science"=>78); echo"Student Name:$name\n"; echo"Age:$Age\n";
 //4.Control Structure
 if/else if($passed){ echo"Status:Passed\n";
}  else{ echo"Status:Failed\n";}
//4.Control Structure-FOREACH
echo"\nSubject
Scores:\n";
$total=0; foreach($subjects as $subject=>$marks){
echo"$subject:$marks\n";
$total+=$marks;  }
 //4.Control Structure-FOR


$average=$total/count($subjects); echo"\nAverage
Score:$average\n";
//Nested if
if($average>=90){ echo"Grade:A\n";
}
elseif($average>=75){ echo
"Grade:B\n";
}elseif($average>=60){ echo
"Grade:C\n";  }
else{ echo"Grade:D\n";
}
?>
```

Output:



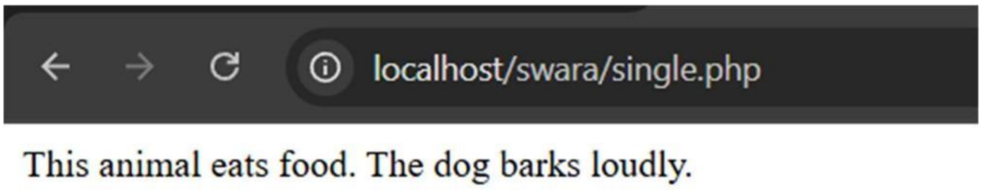
```
Student Name:Daisy Age:22 Status:Passed Subject Scores: Maths:90 English:85 Science:78 Average Score:84.333333333333 Grade:B
```

Experiment No:10

Q. Experiment based on OOP and advance OOP in PHP.

//Single Inheritance

```
<?php class Animal {     public func on eat() {         echo "This animal eats food.\n";

    }

}

class Dog extends Animal {     public func on bark() {         echo "The dog barks loudly.\n";


    }

}

$dog = new Dog();

$dog->eat();   // Inherited method

$dog->bark();  // Child class method

?>
```

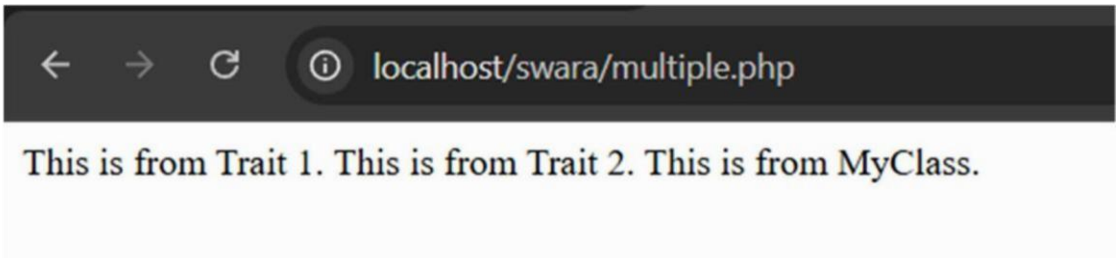


```
This animal eats food. The dog barks loudly.
```

//Multiple Inheritance

```
<?php

trait Trait1 {      public func on showA() {         echo "This is from Trait 1.\n";


    } } trait Trait2 {
    public func on showB() {         echo

"This is from Trait 2.\n";

    }

}

class MyClass {     use Trait1, Trait2;         public func on showC() {         echo "This is from MyClass.\n";


    }

}

$obj = new MyClass();

$obj->showA();
```

```
$obj->showB();

$obj->showC();

?>
```

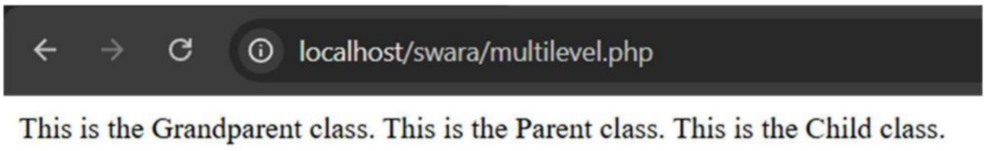


localhost/swara/multiple.php

```
This is from Trait 1. This is from Trait 2. This is from MyClass.
```

//Mul level Inheritance

```
<?php class GrandParentClass {    public func on showGrandParent() {        echo "This is the Grandparent class.\n";

   }

}

class ParentClass extends GrandParentClass {    public func on showParent() {        echo "This is the Parent class.\n";

   }

}

class ChildClass extends ParentClass {    public func on showChild() {        echo

"This is the Child class.\n";

   }

}

$obj = new ChildClass();

$obj->showGrandParent();

$obj->showParent();

$obj->showChild();

?>
```



localhost/swara/multilevel.php

```
This is the Grandparent class. This is the Parent class. This is the Child class.
```

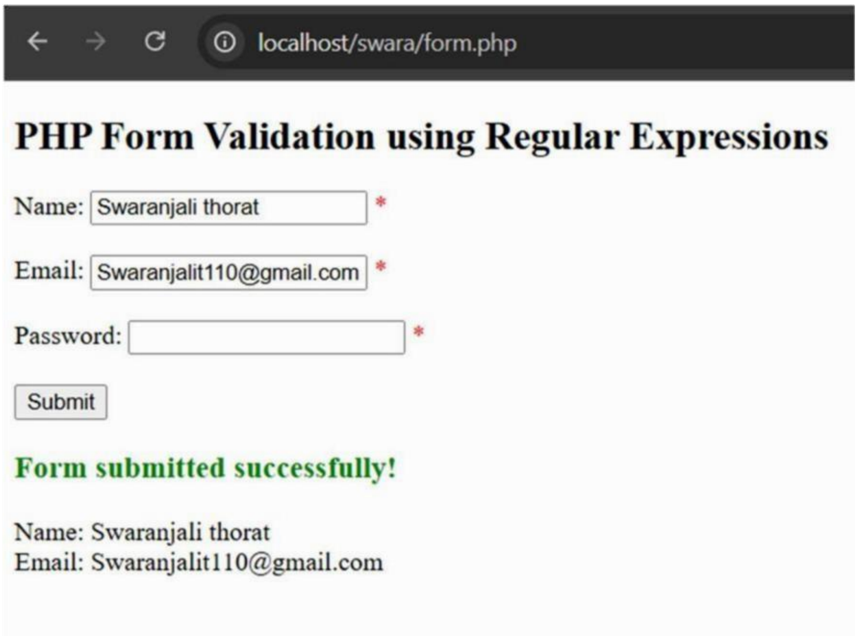
Experiment No:11

Q. Form Validate on using PHP using regular expression.

```
<!DOCTYPE html>
<html>
<head>
  <title>Form Validation using PHP (Regex)</title>
</head>
<body>
<?php
$nameErr = $emailErr = $passwordErr = "";   $name = $email =

$password = "";   if ($_SERVER["REQUEST_METHOD"] ==

"POST") {

  if (empty($_POST["name"])) {
    $nameErr = "Name is required";
  } else {
    $name = $_POST["name"];        if
(!preg_match("/^[a-zA-Z ]*$/", $name)) {
      $nameErr = "Only letters and spaces are allowed";
    }
  }
  if (empty($_POST["email"])) {
    $emailErr = "Email is required";
  } else {
    $email = $_POST["email"];        if (!preg_match("/^[a-zA-Z0-9._%+-]+@[a-zA- Z0-9.-]+\.[a-z]{2,}$/", $email)) {

$emailErr = "Invalid email format";

    }
  }
  if (empty($_POST["password"])) {
    $passwordErr = "Password is required";
} else {
    $password = $_POST["password"];
    if (!preg_match("/^(?=.*[A-Z])(?=.*[a-z])(?=.*\d)(?=.*[@$!%*?&])[A-Za-z\d@$!%*?&]{8,}$/", $password)) {
      $passwordErr = "Password must be at least 8 characters,                    include an

uppercase, lowercase, number and special character";

    }
  }
}
?>
<h2>PHP Form Validation using Regular Expressions</h2>
<form method="post" action="<?php echo htmlspecialchars($_SERVER["PHP_SELF"]);?>">
  Name: <input type="text" name="name" value="<?php echo $name;?>">
  <span style="color:red;">* <?php echo $nameErr;?></span>
  <br><br>
  Email: <input type="text" name="email" value="<?php echo $email;?>">
  <span style="color:red;">* <?php echo $emailErr;?></span>
```

```
    <br><br>
    Password: <input type="password" name="password">

    <span style="color:red;">* <?php echo $passwordErr;?></span>

<br><br>

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

</form>  <?php

if ($nameErr == "" && $emailErr == "" && $passwordErr == "" && $_SERVER["REQUEST_METHOD"]
== "POST") {     echo "<h3 style='color:green;'>Form submitted successfully!</h3>";     echo
"Name: $name <br>";     echo "Email: $email <br>";

}

?>

</body>

</html>
```

Output:



localhost/swara/form.php

PHP Form Validation using Regular Expressions

Name: Swaranjali thorat *

Email: Swaranjalit110@gmail.com *

Password: *

Submit

Form submitted successfully!

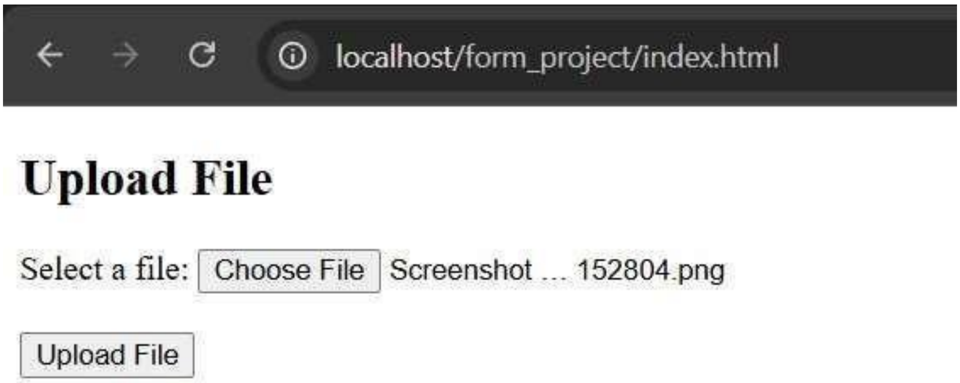
Name: Swaranjali thorat
Email: Swaranjalit110@gmail.com

Experiment No:12

Q. Upload various types of file from Client side to server with validation.

```
<!DOCTYPE html>
<html>
<head>
  <title>File Upload with Validation</title>
</head>
<body>
  <h2>Upload File</h2>
 <form action="upload.php" method="POST" enctype="multipart/form-data">
    <label>Select a file:</label>
    <input type="file" name="myfile" required>
    <br><br>
    <input type="submit" value="Upload File">
  </form>
</body>
</html>
```

Output:



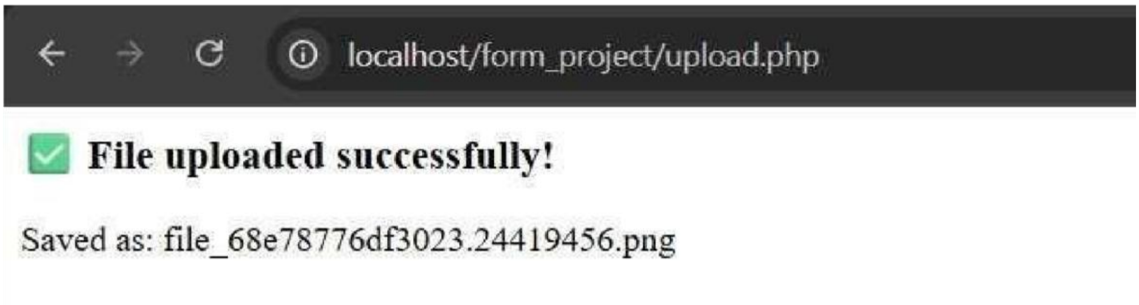
localhost/form_project/index.html

Upload File

Select a file: Screenshot ... 152804.png

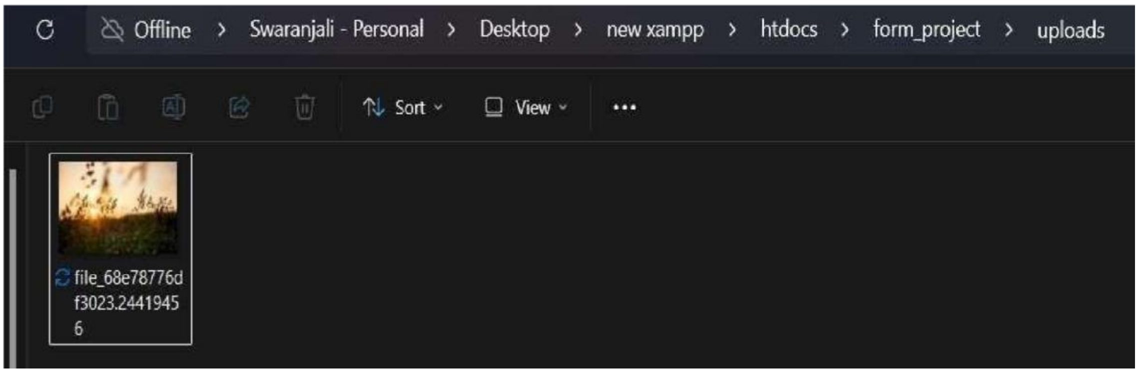
```
<?php
$targetDir = "uploads/"; if
(!is_dir($targetDir)) {     mkdir($targetDir,
0777, true);
}
if (isset($_FILES['myfile'])) {
    $fileName = $_FILES['myfile']['name'];
    $fileTmp = $_FILES['myfile']['tmp_name'];
    $fileSize = $_FILES['myfile']['size'];
    $fileError = $_FILES['myfile']['error'];
     $fileExt = strtolower(pathinfo($fileName, PATHINFO_EXTENSION));
   $allowed = ['jpg', 'jpeg', 'png', 'gif', 'pdf', 'doc', 'docx', 'txt'];     if
($fileError === 0) {        if (in_array($fileExt, $allowed)) {            if
($fileSize <= 5 * 1024 * 1024) {  // 5 MB limit                //
Step 7: Rename file to avoid duplicates
                $newFileName = uniqid("file_", true) . '.' . $fileExt;
                // Step 8: Upload file to folder                $targetFile =
$targetDir . $newFileName;                 if
(move_uploaded_file($fileTmp, $targetFile)) {                    echo
"<h3>  File uploaded successfully!</h3>";                    echo
"Saved as: " . htmlspecialchars($newFileName);
            } else {
               echo "<h3>  Error moving file.</h3>";
            }
         } else {
            echo "<h3>  File size must be less than 5 MB.</h3>";
         }
      } else {
         echo "<h3>  Invalid file type. Allowed: JPG, PNG, GIF, PDF, DOC, DOCX, TXT.</h3>";
      }
   } else {
      echo "<h3>  Upload error code: $fileError</h3>";
   }
} else {      echo "<h3>  No file selected.</h3>";
}
?>
```

Output:



✅ File uploaded successfully!

Saved as: file_68e78776df3023.24419456.png


Offline › Swaranjali - Personal › Desktop › new xampp › htdocs › form_project › uploads
Sort
View
...

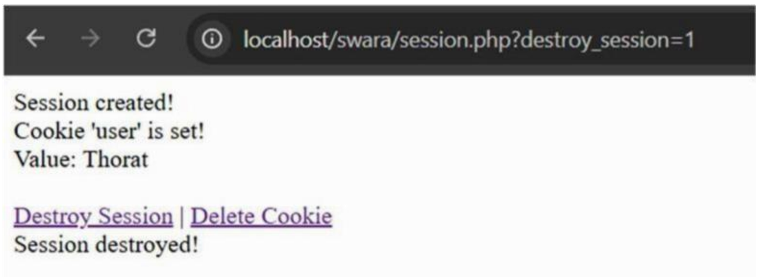
file_68e78776df3023.24419456

Experiment No:13

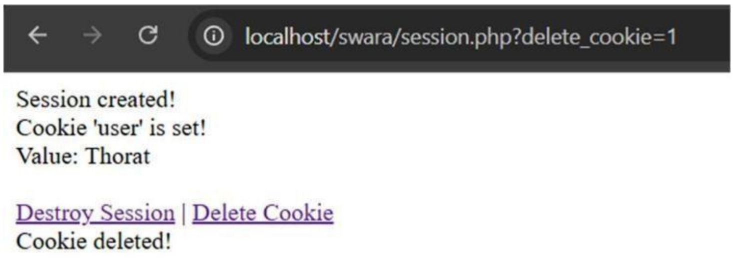
Q. Write a program to create and handle a session, cookie in PHP.

```
<?php  session_start(); if (!isset($_SESSION["username"]))
{    $_SESSION["username"] = "Swaranjali";     echo
"Session created!<br>";
} else {
   echo "Welcome back, " . $_SESSION["username"] . "!<br>";
}
$cookie_name = "user"; $cookie_value = "Thorat"; setcookie($cookie_name,

$cookie_value, me() + 3600, "/"); if

(isset($_COOKIE[$cookie_name])) {     echo "Cookie '" .
$cookie_name . "' is set!<br>";     echo "Value: " .
$_COOKIE[$cookie_name];
} else {     echo "Cookie is not set yet.";
}
echo '<br><br><a href="?destroy_session=1">Destroy Session</a> |
     <a href="?delete_cookie=1">Delete Cookie</a>';


if (isset($_GET['destroy_session'])) {     session_destroy();     echo

"<br>Session destroyed!";


 }

if (isset($_GET['delete_cookie'])) {     setcookie($cookie_name, "", me() - 3600, "/");

echo "<br>Cookie deleted!";


}

?>
```

Output:



```
Session created!
Cookie 'user' is set!
Value: Thorat

Destroy Session | Delete Cookie
Session destroyed!
```



```
Session created!
Cookie 'user' is set!
Value: Thorat

Destroy Session | Delete Cookie
Cookie deleted!
```

Experiment No:14

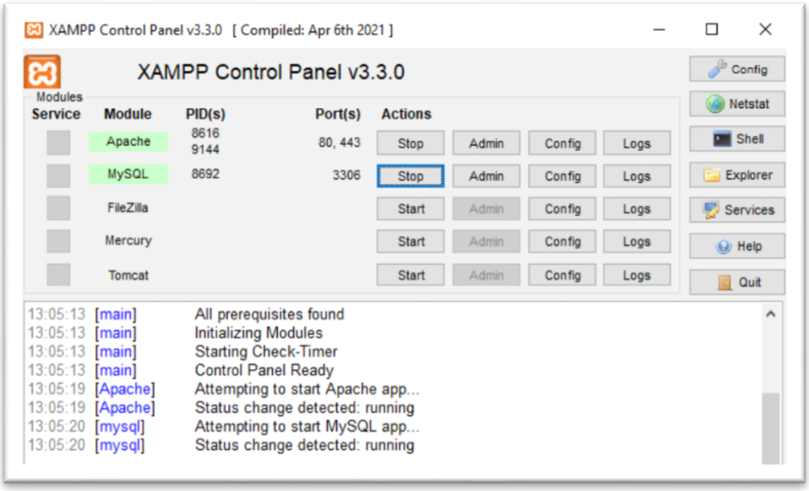
Title :- Insert user entered data in form to MYSQL database using PHP

```
// Index.html:-
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Data experiment</title>
</head>
<body>
    <h2>register user</h2>
    <form action="insert.php" method="post">
        <label for="">Name:</label><br>
        <input type="text" name="name"required> <br><br>
        <label for="">Email::</label><br>
        <input type="email" name="email"required> <br><br>
        <label for="">password:</label><br>
        <input type="password" name="password"required> <br><br>

        <input type="submit" value="submit">
    </form>
</body>
</html>
```

```
// Folder Insert.php
Code;
<?php
$servername = "localhost";
$username = "root";
$password = "";  // default for XAMPP
$database = "webtech_db";
$conn = new mysqli($servername, $username, $password, $database);
if ($conn->connect_error) {
    die("Connection failed: " . $conn->connect_error);
}
$name = $_POST['name'];
$email = $_POST['email'];
$pass = $_POST['password'];
$hashed_pass = password_hash($pass, PASSWORD_DEFAULT);
$sql = "INSERT INTO users (name, email, password) VALUES (?, ?, ?)";
$stmt = $conn->prepare($sql);
$stmt->bind_param("sss", $name, $email, $hashed_pass);
if ($stmt->execute()) {
    echo "<h3>✅ Data inserted successfully!</h3>";
    echo "<a href='index.html'>Go Back</a>";
} else {
    echo "❌ Error: " . $stmt->error;
}
$stmt->close();
$conn->close();
?>
```

Output:-

Start xampp :-



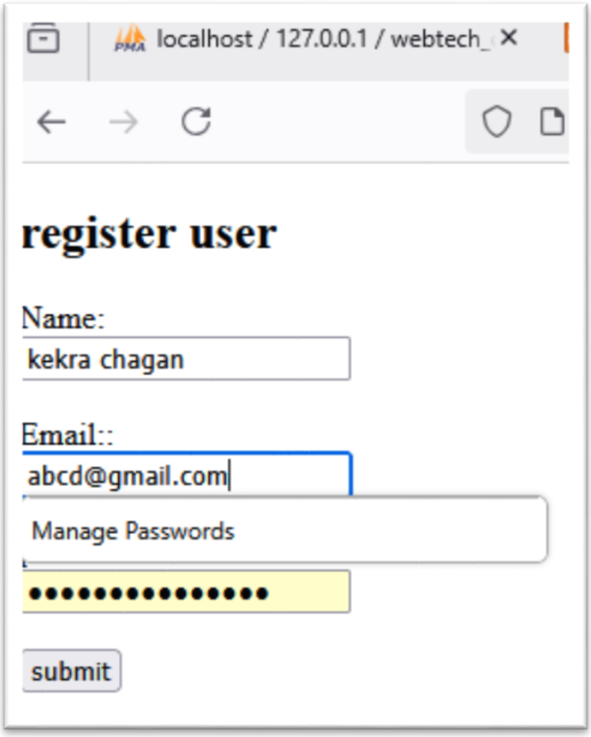
XAMPP Control Panel v3.3.0 [Compiled: Apr 6th 2021]

XAMPP Control Panel v3.3.0

Service	Module	PID(s)	Port(s)	Actions			
	Apache	8616 9144	80, 443	Stop	Admin	Config	Logs
	MySQL	8692	3306	Stop	Admin	Config	Logs
	FileZilla			Start	Admin	Config	Logs
	Mercury			Start	Admin	Config	Logs
	Tomcat			Start	Admin	Config	Logs

```
13:05:13  [main]     All prerequisites found
13:05:13  [main]     Initializing Modules
13:05:13  [main]     Starting Check-Timer
13:05:13  [main]     Control Panel Ready
13:05:19  [Apache]   Attempting to start Apache app...
13:05:19  [Apache]   Status change detected: running
13:05:20  [mysql]    Attempting to start MySQL app...
13:05:20  [mysql]    Status change detected: running
```

2) Insert data through form



register user

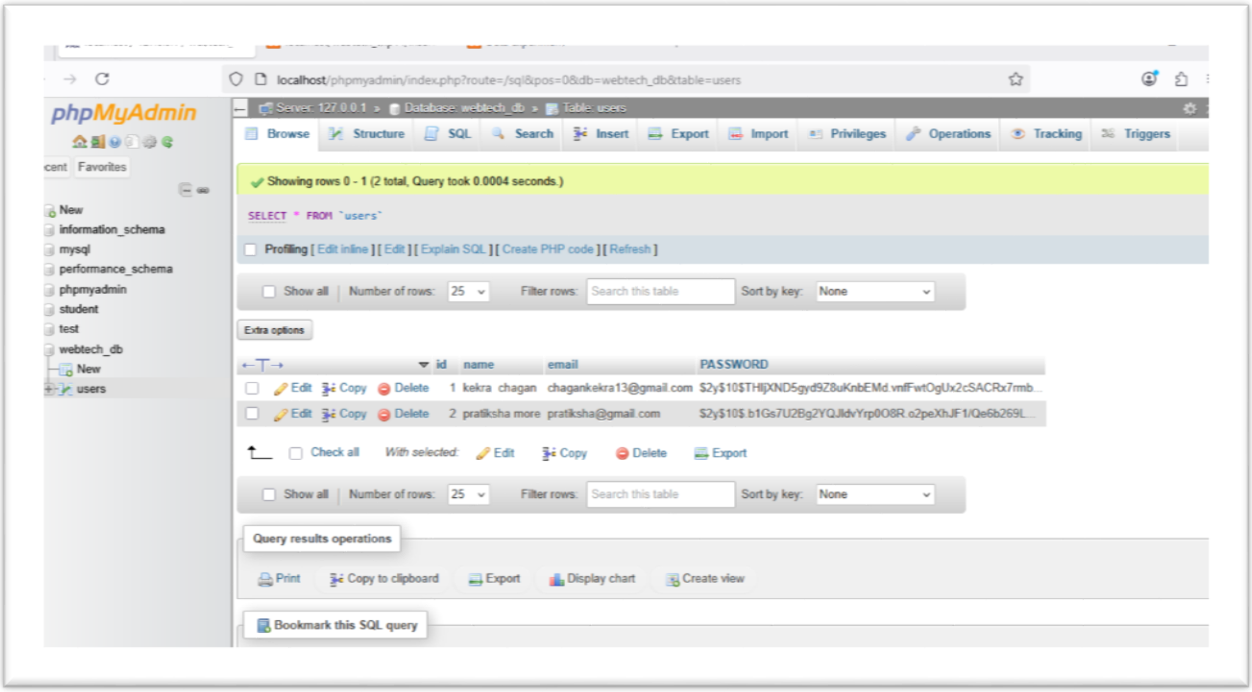
Name:
kekra chagan

Email::
abcd@gmail.com

Manage Passwords

•••••••••••••••

3) stored data in created detabase



localhost/phpmyadmin/index.php?route=/sql&pos=0&db=webtech_db&table=users
phpMyAdmin
Server: 127.0.0.1 » Database: webtech_db » Table: users
Browse
Structure
SQL
Search
Insert
Export
Import
Privileges
Operations
Tracking
Triggers
Recent
Favorites
New
information_schema
mysql
performance_schema
phpmyadmin
student
test
webtech_db
New
users

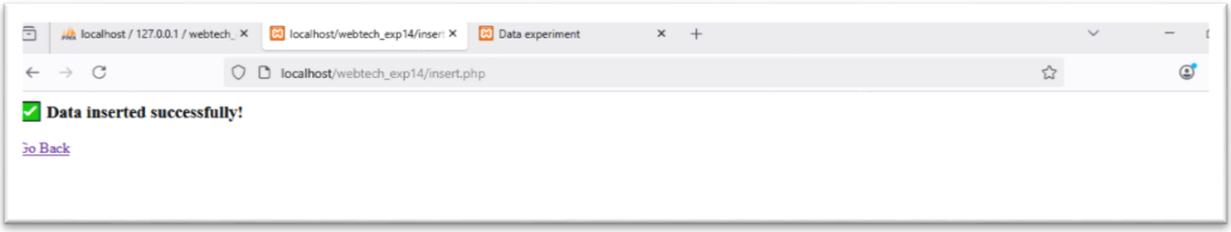
✓ Showing rows 0 - 1 (2 total, Query took 0.0004 seconds.)

```
SELECT * FROM `users`
```

□ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
□ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None
Extra options

	id	name	email	PASSWORD
□ Edit Copy Delete	1	kekra chagan	chagankekra13@gmail.com	$2y$10$THljXND5gyd9Z8uKnbEMd.vnfFwtOgUx2cSACRx7rmb...
□ Edit Copy Delete	2	pratiksha more	pratiksha@gmail.com	$2y$10$.b1Gs7U2Bg2YQJldvYrp0O8R.o2peXhJF1/Qe6b269L...

□ Check all With selected: Edit Copy Delete Export
□ Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None
Query results operations
Print
Copy to clipboard
Export
Display chart
Create view
Bookmark this SQL query



localhost / 127.0.0.1 / webtech_
localhost/webtech_exp14/insert
Data experiment
localhost/webtech_exp14/insert.php

✅ **Data inserted successfully!**