

**RAJALAKSHMI ENGINEERING COLLEGE**  
**RAJALAKSHMI NAGAR, THANDALAM – 602 105**



**RAJALAKSHMI**  
**ENGINEERING COLLEGE**

**Laboratory Record Note Book**

Name : .....

Year / Branch / Section : .....

Register No. : .....

College Roll No. : .....

Semester : .....

Academic Year : .....

**RAJALAKSHMI ENGINEERING COLLEGE**  
**RAJALAKSHMI NAGAR, THANDALAM – 602 105**

**BONAFIDE CERTIFICATE**

Name : .....

Academic Year : ..... Semester : ..... Branch : .....

**Register No.**

--

*Certified that this is the bonafide record of work done by the above student in the*

*..... Laboratory during the year*

**20    - 20**

**Signature of Faculty in-charge**

Submitted for the Practical Examination held on .....

**Internal Examiner**

**External Examiner**

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Reg. No. : \_\_\_\_\_ Name : \_\_\_\_\_

Year : \_\_\_\_\_ Branch : \_\_\_\_\_ Sec : \_\_\_\_\_

<b>S. No.</b>	<b>Date</b>	<b>Title</b>	<b>Page No.</b>	<b>Teacher's Signature / Remarks</b>
1		Create a web page to embed a map along with hot spot AND links		
2		Create a web page using an embedded, external, and inline CSS file		
3		Create a registration page along with validations		
4a		JSP - Library Management System		
4b		Servlet - Bank Application		
5		PHP – Employee Details to connect database and execute queries to retrieve and update data. Prepare report for single and group of employees based on the end user needs		
6		Bootstrap – Web Page		
7		Design a Web page with Navigation menu, Inline editor, Order form, Instant Search & Switchable Grid.		
8		Angular JS – Single Page Application		

**CD19643 – WEB ESSENTIALS****List of Experiments:**

1. Create a web page to embed a map along with hot spot, frames & links.
2. Create a web page using an embedded, external and inline CSS file.
3. Create a registration page along with validations.
4. Consider a Library Management System. Develop a JavaScript program that will validate the controls in the forms you have created for the application. State the assumptions you make (business logic you are taking into consideration). Note: Your application must access a database using Servlet / JSP.
5. Write a PHP program for Employee Details, which includes EmpID, Name, Designation, Salary, DOJ, etc., to connect with the database and execute queries to retrieve and update data. Also, prepare the report for single and group of employees based on the end user needs.
6. Develop an Attractive web pages using Bootstrap.
7. Design a Web page with Navigation menu, Inline editor, Order form, Instant Search & Switchable Grid.
8. Design a single page application using Angular 14.

**Ex.No:1          Creating a web page to embed a map along with hot spot AND links.****AIM:**

To create a web page to embed a map along with hot spot and links.

**ALGORITHM:**

1. To create a web page, use html tags and give the suitable title.
2. <map> tag is used to define an image map which is an image with clickable areas.
3. <area> tag is used to specify a area inside the image.
4. Inside the area tag shape, coordinate, href and alt values are given.
5. Image source is taken and given in <img> tag and use map attribute specifies an image as a user side image map.

**PROGRAM:**Index.html

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>MapImage</title>
  </head>
  <body>
    <map id="picture" name="picture">
      <area href="TamilNadu.html" shape="rect" coords="418,902,322,1063"
alt="TamilNadu"/>
      <area href="karnataka.html" shape="rect" coords="217,951,309,758" alt
="Karnataka"/>
      <area href="Maharashtra.html" shape="rect" coords="157,754,338,613"
alt="Maharashtra"/>
      <area href="rajasthan.html" shape="rect" coords="63,484,309,341" alt="Rajasthan"/>
      <area href="Andhra.html" shape="rect" coords="312,892,428,796"
alt="AndhraPradesh"/>
    </map>
    
  </body>
</html>
```

TamilNadu.html:

```
<!DOCTYPE html>
<html lan="en">
```

```

<head>
  <title>TamilNaduImage</title>
</head>
<style>
  body {background-color: rgb(247, 250, 250);}
  h1 {color:rgb(91, 5, 5)}
  p {color:rgb(45, 45, 61); text-align :justify}
  * {
    box-sizing:border-box;
  }

.column {
  float: right;
  width: 30%;
  padding: 5px;
}

</style>
<body>
  <h1>TamilNadu</h1>
  <p>Tamil Nadu is straddled by the Western Ghats and Deccan Plateau in the west, the
  Eastern Ghats in the north, the Eastern Coastal Plains lining the Bay of Bengal in the east, the
  Gulf of Mannar and the Palk Strait to the south-east, the Laccadive Sea at the southern cape
  of the peninsula, with the river Kaveri bisecting the state. Politically, Tamil Nadu is bound by
  the Indian states of Kerala, Karnataka, and Andhra Pradesh, and the union territory of
  Puducherry and shares an international maritime border with the Northern Province of Sri
  Lanka at Pamban Island.

  Archaeological evidence points to Tamil Nadu being inhabited for more than 400
  millennia and has more than 5,500 years of continuous cultural history. Historically, the
  Tamilakam region was inhabited by Tamil-speaking Dravidian people and was ruled by
  several regimes over centuries, such as the Sangam era triumverate of the Cheras, Cholas and
  Pandyas, the Pallavas (3rd–9th century CE), and the later Vijayanagara Empire (14th–17th
  century CE).<br><br><br> </p>
  <div class="row">
    <div class="column">
      
    </div>
    <div class="column">
      
    </div>
    <div class="column">
      
    </div>
  </div>

```

```

    </div>
  </body>
</html>

```

### Karnataka.html:

```

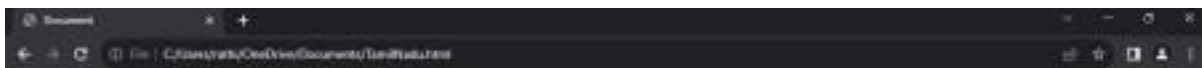
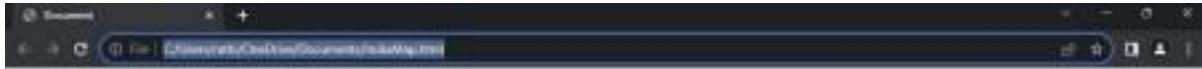
<!DOCTYPE html>
<html lan="en">
  <head>
    <title>KarnatakaImage</title>
  </head>
  <style>
    body {background-color: rgb(247, 250, 250);}
    h1 {color:rgb(91, 5, 5)}
    p {color:rgb(45, 45, 61); text-align :justify}
    * {
      box-sizing:border-box;
    }

    .column {
      float: right;
      width: 30%;
      padding: 5px;
    }

  </style>
  <body>
    <h1>Karnataka</h1>
    <p>Karnataka is derived from the Kannada words karu and nādu, meaning "elevated land". Karu Nadu may also be read as karu, meaning "black" and nadu, meaning "region", as a reference to the black cotton soil found in the Bayalu Seeme region of the state. The British used the word Carnatic, sometimes Karnatak, to describe both sides of peninsular India, south of the Krishna.<br>With an antiquity that dates to the paleolithic, Karnataka has been home to some of the most powerful empires of ancient and medieval India. The philosophers and musical bards patronised by these empires launched socio-religious and literary movements which have endured to the present day. Karnataka has contributed significantly to both forms of Indian classical music, the Carnatic and Hindustani traditions..<br><br><br> </p>
    <div class="row">
      <div class="column">
        
      </div>
      <div class="column">
        
      </div>
    </div>
  </body>
</html>

```

```
<div class="column">
  
</div>
</div>
</body>
</html>
```

**OUTPUT:****TamilNadu**

For centuries here Bharatanatyam and many types of music, including Carnatic music, have flourished. Tamil Nadu has a long history of its literature, art, music, and dance and is an emerging hub of technology and modern lifestyle in India and is one of the top-performing states of the Literacy rate in India.....

**Result:**

Thus, the given program is executed successfully.



**Ex.NO:2      Web page creation using an embedded, external, and inline CSS file.****AIM:**

To create a web page using an embedded, external, and inline CSS file.

**ALGORITHM:**

1. Web page is created using html tags.
2. To style the sheet give inline CSS if it is needed.
3. Else create a separate CSS file which is external and link with the html file.
4. Another way of applying CSS is by using the <style> tag within html file.
5. CSS given for P tag, classes and headings.

**PROGRAM:**Index.html:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title> BEC</title>
  </head><title> BEC</title>
  <style>
    .topnav {
      background-color: #cfcccc;
      overflow:auto;
    }

    /* Style the links inside the navigation bar */
    .topnav a {
      float: left;
      color:rgb(14, 14, 44);
      text-align: center;
      padding: 14px 16px;
      text-decoration:double;
      font-weight: bold;
      font-size: 22px;
    }

    /* Change the color of links on hover*/
    .topnav a:hover {
      background-color: #ddd;
      color: black;
    }
  </style>
</html>
```

```

/* Create a right-aligned (split) link inside the navigation bar */
.topnav a.split {
  float: right;
  background-color: #76b98d;
  color: rgb(255, 255, 255);
}
.center {
  position: absolute;
  top: 100px;
  right: 570px;
  font-size: 32px;
  text-align: center;
  font-weight: bolder;
  color:rgb(14, 14, 44) ;
}
.column {
  float: right;
  width: 32%;
  padding: 2px;
  padding-top: 50px;
}

img {
  opacity: 0.8;
  border-radius: 8px;
}

/*img:hover {
  opacity: 1.0;
}*/
.hw{
  text-align: center;
  font-size:25px;
  font-weight: bold;
  color:rgb(14, 14, 44);
  overflow: auto;
  padding-bottom: 50px;
}
.cen{
  position: absolute;
  top: 850px;
  right: 100px;
  left:100px;
  font-size: 28px;
  text-align: center;
  font-weight:500;
  color:rgb(242, 242, 246) ;
}
.cent{

```

```

position: absolute;
top: 135px;
right: 500px;
font-size: 20px;
font-weight: lighter;
text-align: center;
color:rgb(30, 30, 102);
}
.A1{
opacity: 1.0;
}

</style>
<body>

    <div class="topnav">
        <a href="#home">Home</a>
        <a href="about.html">About</a>
        <a href="contact.html">News</a>
        <a href="#contact">Contact</a>
        <a href="#news" class="split">Help</a>
    </div>
    <div>
        
        <div class="center">Best Engineering College</div>
        <div class="cent">An Autonomous Institution, Affiliated to Anna University.</div>
        <div class="cen">College is an educational school where people go to learn and earn
an academic degree upon graduation. The requirement to enter college is different in different
countries, but in most countries, the student must have a high school diploma or equivalent
    </div>
    </div>
    <div class="row">
        <div class="column">
            
            <div class="hw">Students</div>

        </div>
        <div class="column">
            
            <div class="hw">Infrastructure</div>

        </div>
        <div class="column">

```

```

    
    <div class="hw">Labs and Classes</div>
  </div>
</div>
</body>
</html>

```

### About.html:

```

<!DOCTYPE html>
<html lang="en">
  <head>
    <title> BEC</title>
  </head><title> BEC</title>
  <style>
    .topnav {
      background-color: #cfcccc;
      overflow:auto;
    }

    /* Style the links inside the navigation bar */
    .topnav a {
      float: left;
      color:rgb(14, 14, 44);
      text-align: center;
      padding: 14px 16px;
      text-decoration:double;
      font-weight: bold;
      font-size: 22px;
    }

    /* Change the color of links on hover*/
    .topnav a:hover {
      background-color: #ddd;
      color: black;
    }

    /* Create a right-aligned (split) link inside the navigation bar */
    .topnav a.split {
      float: right;
      background-color: #76b98d;
      color: rgb(255, 255, 255);
    }
    .center {
      position: absolute;
      top: 100px;
      right: 570px;
      font-size: 32px;
      text-align: center;
    }

```

```
font-weight: bolder;
color:rgb(14, 14, 44) ;
}
.column {
float: right;
width: 32%;
padding: 2px;
padding-top: 50px;

}
img {
opacity: 0.8;
border-radius: 8px;
}

/*img: hover {
opacity: 1.0;
}*/
.hw{
text-align: center;
font-size:25px;
font-weight: bold;
color:rgb(14, 14, 44);
overflow: auto;
padding-bottom: 50px;
}
.cen{
position: absolute;
top: 850px;
right: 100px;
left:100px;
font-size: 28px;
text-align: center;
font-weight:500;
color:rgb(242, 242, 246) ;
}
.cent{
position: absolute;
top: 135px;
right: 500px;
font-size: 20px;
font-weight: lighter;
text-align: center;
color:rgb(30, 30, 102) ;
}
.A1{
opacity: 1.0;
}

</style>
```

```

<body>

<div class="topnav">
  <a href="#home">Home</a>
  <a href="about.html">About</a>
  <a href="contact.html">News</a>
  <a href="#contact">Contact</a>
  <a href="#news" class="split">Help</a>
</div>
<div>
  
  <div class="center">Best Engineering College</div>
  <div class="cent">An Autonomous Institution, Affiliated to Anna University.</div>
  <div class="cen">College is an educational school where people go to learn and earn an academic degree upon graduation. The requirement to enter college is different in different countries, but in most countries, the student must have a high school diploma or equivalent
</div>
</div>
<div class="row">
  <div class="column">
    
    <div class="hw">Students</div>

  </div>
  <div class="column">
    
    <div class="hw">Infrastructure</div>

  </div>
  <div class="column">
    
    <div class="hw">Labs and Classes</div>
  </div>
</div>
</body>
</html>

```

News.html:

```

<!DOCTYPE html>
<html lang="en">
<head>

```

```

<title>News</title>
</head>
<style>
  body{
    background-color: white;
  }
  p{
    padding-inline-start: 30px;
    font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
    color:rgb(14, 14, 44);
    font-size: medium;
    text-align: justify;
  }
  .hw{
text-align: center;
font-size:25px;
font-weight: bold;
color:rgb(14, 14, 44);
overflow: auto;
padding-bottom: 50px;
}
.column {
float: right;
width: 32%;
padding: 2px;
padding-top: 50px;

}
</style>
<body>
  <h1>News:</h1>
  <p>There has also been a recent trend to rename or create government secondary
schools as "colleges". In the state of Victoria, some state high schools are referred to as
secondary colleges, although the pre-eminent government secondary school for boys in
Melbourne is still named Melbourne High School. In Western Australia, South Australia and
the Northern Territory, "college" is used in the name of all state high schools built since the
late 1990s, and also some older ones. In New South Wales, some high schools, especially
multi-campus schools resulting from mergers, are known as "secondary colleges". In
Queensland some newer schools which accept primary and high school students are styled
state college, but state schools offering only secondary education are called "State High
School". In Tasmania and the Australian Capital Territory, "college" refers to the final two
years of high school (years 11 and 12), and the institutions which provide this. In this context,
"college" is a system independent of the other years of high school. Here, the expression is a
shorter version of matriculation college.</p>
</body>
<div class="row">
  <div class="column">
    
    <div class="hw">Students</div>

```

```

</div>
<div class="column">
  
  <div class="hw">Infrastructure</div>

</div>
<div class="column">
  
  <div class="hw">Labs and Classes</div>
</div>
</div>
</html>

```

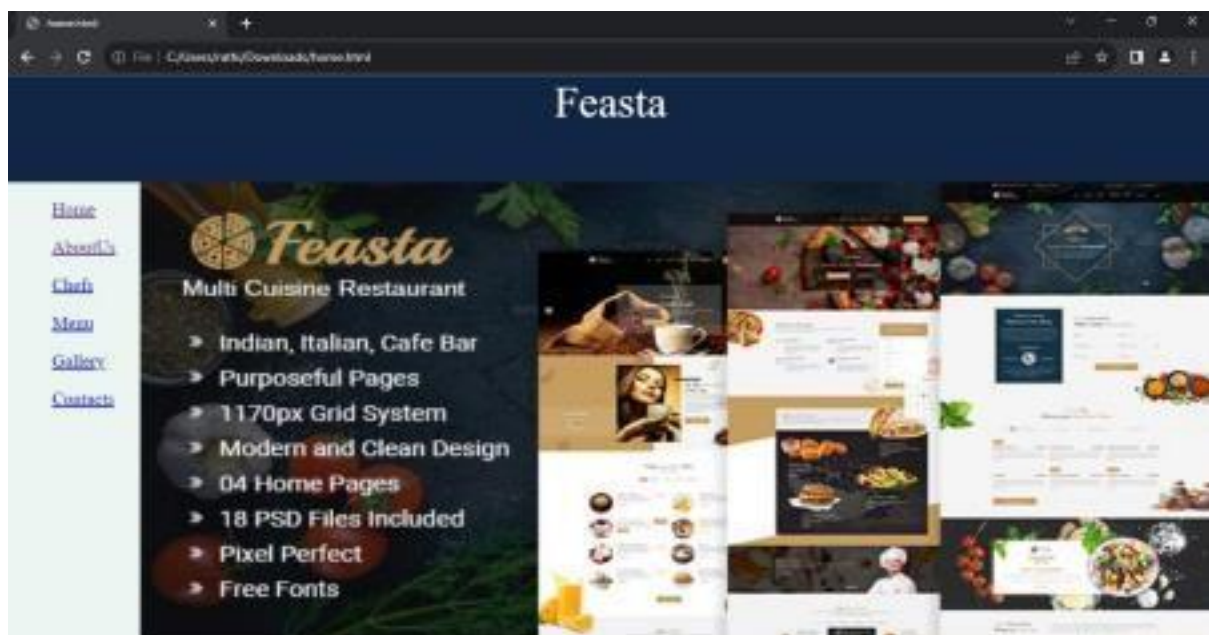
### Style.css:

```

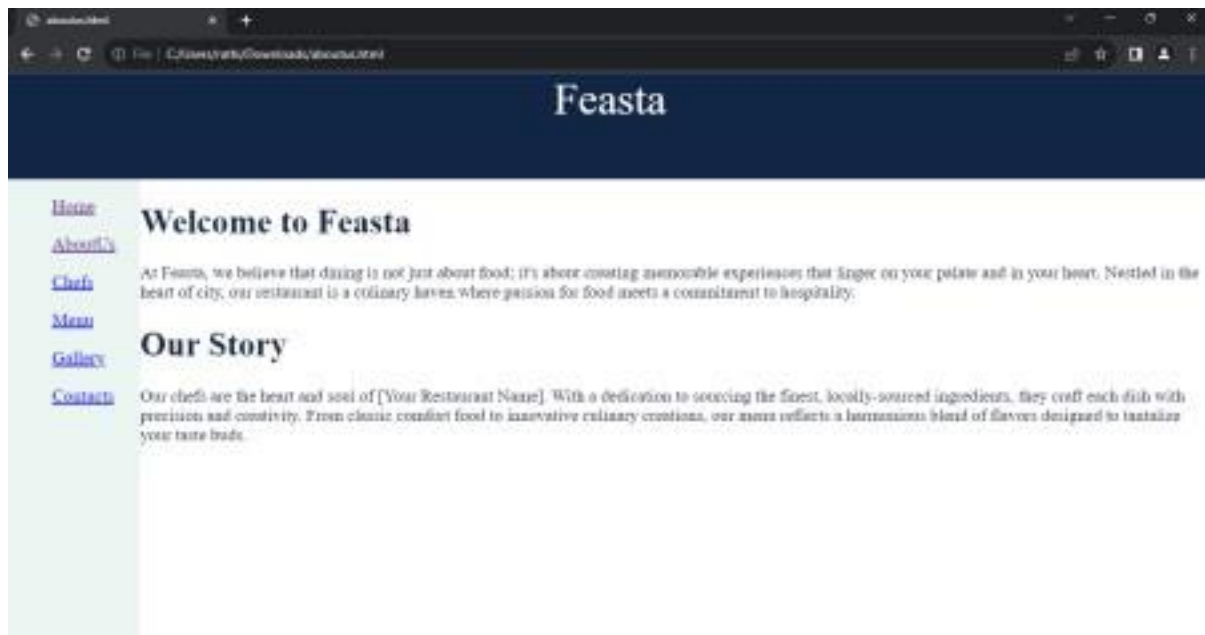
.Content{margin-left:0px;
Display:flex;
Flex direction:row;}

```

### OUTPUT:





**Result:**

Thus, the given program is executed successfully.

**Ex.No:3                      Creation of registration page along with validations.****AIM:**

To create a registration form with validations.

**ALGORITHM:**

1. Create a registration form interface with HTML and CSS.
2. Get inputs from the user using the input tag.
3. Set appropriate tables above the input boxes.
4. Finally call the java script file using @media to access the file.
5. Perform validation and display alert message validation when submitted.

**PROGRAM:**Reg.html:

```
<!DOCTYPE html>
<html lan="en">
  <head>
    <title>Regform</title>
  </head>
  <style>

.registration-form {
  width: 100%;
  max-width: 400px;
  margin: 0 auto;
  top:100px;
}
.registration-form input[type="text"], .registration-form input[type="email"], .registration-
form input[type="password"] {
  width: 100%;
  padding: 15px;
  margin-bottom: 10px;
  border-radius: 5px;
  border: 1px solid #ccc;
}
.registration-form input[type="submit"] {
  width: 100%;
  padding: 15px;
  background-color: #4CAF50;
  color: white;
  border: none;
```

```

border-radius: 5px;
cursor: pointer;
}
@media (max-width: 600px) {
.registration-form input[type="text"], .registration-form input[type="email"], .registration-
form input[type="password"] {
width: 100%;
}
}
p{
text-align: center;
font-weight:bold;
font-size: larger;
color:blue;
}

</style>
<body>
<div class="back">


</div>

<form class="registration-form">
<p>Registration Form</p>
<label for="first"><b>First Name:</b></label>
<input type="text" name="first" placeholder="First Name" required>
<label for="last"><b>Last Name:</b></label>
<input type="text" name="last" placeholder="Last Name" required>
<label for="dept"><b>Department:</b></label>
<input type="text" name="dept" placeholder="Department" required>
<label for="email"><b>Email Id:</b></label>
<input type="email" name="email" placeholder="Email" required>
<label for="pass"><b>PassWord:</b></label>
<input type="password" name="pass" placeholder="Password" required>
<input type="checkbox" required> I agree to the terms and conditions.
<br><br><br>
<input type="submit" value="Register">

</form>
</body>
</html>

```

**OUTPUT:**

Registration Form

First Name:  
First Name

Last Name:  
Last Name

Department:  
Department

Email ID:  
Email

Pass/Word:  
Password

☐ I agree to the terms and conditions

Register

Registration Form

First Name:  
First Name

Last Name:  
Last Name

Department:  
Department

Email ID:  
Email

Pass/Word:  
Password

☐ I agree to the terms and conditions

Register

**Result:**

Thus, the given program is executed successfully.

**Ex.No:4      JSP –Library Management System****AIM:**

Program to develop a library Management System application accessing a database using JSP.

**ALGORITHM:**

Relations using MYSQL given below enforcing primary key and foreign key constraints:

BOOK (ACCNO, TITLE, AUTHOR, PUBLISHER, EDITION, PRICE)

MEMBER (MID, MNAME,

BRANCH) FINE (MID,

FINE\_DATE, AMOUNT)

1. Open MySQL.

2. Create a database.

```
mysql> create database library; Query  
OK, 1 row affected (0.02 sec)
```

3. Connect to the database.

```
mysql> use library;  
Database changed
```

4. Create the following tables:

```
mysql> create table book (accno integer, title varchar(20),  
-> author varchar(20), publisher varchar(20),  
-> edition integer, price integer, primary key (accno));  
Query OK, 0 rows affected (0.09 sec)
```

```
mysql> create table member (mid integer, mname varchar(20),  
-> branch varchar(20), primary key (mid));  
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> create table fine (mid integer references member(mid),  
-> fine_date date, amount integer);  
Query OK, 0 rows affected (0.06 sec)
```

**PROGRAM:****add-author.html**

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">

<head>
<meta charset="utf-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>Add Authors</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
</head>

<body>
  <div th:insert="comman/header :: header"></div>
  <div class="container my-5">
    <h3>Add Authors</h3>

    <div class="card-body">
      <div class="col-md-10">
        <form action="#" th:action="@{/add-author}" th:object="${author}"
          method="post">
          <div class="row">

            <div class="form-group col-md-8">
              <label for="name" class="col-form-label">Author
Name</label> <input
              type="text" th:field="*{ name}"
              class="form-control" id="name"
              placeholder="Author Name" />
            </div>

            <div class="form-group col-md-8">
              <label for="description" class="col-form-
label">Description</label>
              <input type="text" th:field="*{ description}"
              class="form-control"
              id="description" placeholder="Description"
              />
            </div>

            <div class="col-md-6">
              <input type="submit" class="btn btn-success"
              value=" Submit ">
            </div>
          </div>
        </form>
      </div>
    </div>
  </div>

```

</div>  
</form>

```

        </div>
    </div>
</div>

```

```

<div th:insert="comman/footer :: footer"></div>

```

```

</body>

```

```

</html>

```

## Update-category.html

```

<!DOCTYPE html>

```

```

<html xmlns:th="http://www.thymeleaf.org">

```

```

<head>

```

```

<meta charset="utf-8">

```

```

<meta http-equiv="x-ua-compatible" content="ie=edge">

```

```

<title>Update Category</title>

```

```

<meta name="viewport" content="width=device-width, initial-scale=1">

```

```

<link rel="stylesheet"

```

```

    href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">

```

```

<link rel="stylesheet"

```

```

    href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">

```

```

</head>

```

```

<body>

```

```

    <div th:insert="comman/header :: header"></div>

```

```

    <div class="container my-5">

```

```

        <h3>Update Category</h3>

```

```

        <div class="card">

```

```

            <div class="card-body">

```

```

                <div class="col-md-10">

```

```

                    <form action="#"

```

```

                        th:action="@{/update-category/{id}(id=${category.id})}"

```

```

                        th:object="${category}" method="post">

```

```

                    <div class="row">

```

```

                        <div class="form-group col-md-8">

```

```

                            <label for="name" class="col-form-

```

```

label">Category Name</label> <input

```

```

                                type="text" th:field="*{name}"

```

```

                                class="form-control" id="name"

```

```

                                placeholder="Category Name" />

```

```

                        </div>

```

```

                    <div class="col-md-6">

```

```

                        <input type="submit" class="btn btn-

```

```

success" value=" Submit ">

```

```

                    </div>

```



</div> </div>  
</form>

```
<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
```

```
<head>
<meta charset="utf-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>Update Book</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
</head>
```

```
<body>
  <div th:insert="comman/header :: header"></div>
  <div class="container my-5">
    <h3>Update Book</h3>
    <div class="card">
      <div class="card-body">
        <div class="col-md-10">
          <form action="#" th:action="@{/update-
book/{id}(id=${book.id})}"
                                th:object="${book}" method="post">
            <div class="row">
```

```
<div class="form-group col-md-8">
  <label for="isbn" class="col-form-
label">ISBN</label> <input
class="form-control" id="isbn"
th:errors="*{ isbn }"></span>
placeholder="ISBN" /> <span
th:if="$ { #fields.hasErrors('isbn') }"
</div>
```

label">Book Name</label> <input  
class="form-control" id="name"

```
<div class="form-group col-md-8">
```

```
  <label
```

```
    for="name"
```

```
    >
```

```
    class="col-form-type="text"
```

```
    th:field="*{name}"
```

```
    placeholder="Book Name" />
```

```
</div>
```

```

<div class="form-group col-md-8">
  <label for="serialName" class="col-form-
label">Serial
th:field="*{serialName}"
id="serialName" placeholder="Serial Name" />
  Name </label> <input type="text"
class="form-control"

</div>

<div class="form-group col-md-8">
  <label for="description" class="col-form-
label">Description</label>
  <input type="text" th:field="*{description}"
class="form-control"
id="description" placeholder="Description" />

</div>

<div class="col-md-6">
  <input type="submit" class="btn btn-
success" value=" Submit ">

</div>

</div>
</form>
</div>
</div>
</div>
</div>
<div th:insert="comman/footer :: footer"></div>
</body>
</html>

```

### Update-publisher.html:

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">

<head>
<meta charset="utf-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>Update Publisher</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
</head>

<body>
<div th:insert="comman/header :: header"></div>

```

```
<div class="container my-5">  
  <h3>Update Publisher</h3>
```

```

<div class="card">
  <div class="card-body">
    <div class="col-md-10">
      <form action="#"
        th:action="@{/update-publisher/{id}(id=${publisher.id})}"
        th:object="${publisher}" method="post">
        <div class="row">

          <div class="form-group col-md-8">
            <label for="name" class="col-form-
label">Publisher Name</label>
            <input type="text" th:field="*{ name}"
class="form-control"
id="name" placeholder="Publisher
Name" />

          </div>

          <div class="col-md-6">
            <input type="submit" class="btn btn-
success" value=" Submit ">

          </div>

        </div>
      </form>
    </div>
  </div>
</div>

<div th:insert="comman/footer :: footer"></div>
</body>
</html>

```

### Update-author.html:

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">

<head>
<meta charset="utf-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>Update Author</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
  href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
  href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
</head>

<body>
  <div th:insert="comman/header :: header"></div>
  <div class="container my-5">

```

<h3>Update Author</h3>  
<div class="card">

```

<div class="card-body">
  <div class="col-md-10">
    <form action="#"
      th:action="@{/update-author/{id}(id=${author.id})}"
      th:object="${author}" method="post">
      <div class="row">

        <div class="form-group col-md-8">
          <label for="name" class="col-form-
label">Author Name</label> <input
                                type="text" th:field="*{name}"
class="form-control" id="name"
                                placeholder="Author Name" />

        </div>

        <div class="form-group col-md-8">
          <label for="description" class="col-form-
label">Description</label>
                                <input type="text" th:field="*{description}"
                                class="form-control"
id="description" placeholder="Description" />

        </div>

        <div class="col-md-6">
          <input type="submit" class="btn btn-
success" value=" Submit ">

        </div>

      </div>
    </form>
  </div>
</div>

<div th:insert="comman/footer :: footer"></div>
</body>

</html>

```

### List-author.html:

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
<head>
<meta charset="UTF-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>All Authors</title>

<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"

```



href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">

```

</head>
<body>
  <div th:insert="comman/header :: header"></div>
  <div class="container my-2">

    <div th:switch="{authors}" class="container my-5">
      <p class="my-5">
        <a href="/addAuthor" class="btn btn-dark"> <i
          class="fas fa-user-plus ml-2"> Add Authors
        </i></a>&nbsp;&nbsp;&nbsp;<a
          href="/export/all-author" class="btn btn-info"> <i
            class="fas fa-file-csv ml-2"> Export CSV </i></a>
      </p>

      <div class="col-md-12">
        <h2 th:case="null">No record found !!</h2>
        <div th:case="*">
          <table class="table table-bordered">
            <thead>
              <tr>
                <th>Author Name</th>
                <th>Description</th>
                <th>Edit</th>
                <th>Delete</th>
              </tr>
            </thead>
            <tbody>

              <tr th:each="author : {authors}">
                <td th:text="{author.name}"></td>
                <td th:text="{author.description}"></td>
                <td><a
                  th:href="@{/updateAuthor/{id}(id={author.id})}"
                  class="btn btn-warning"><i
                    class="fas fa-user-edit ml-2"></i></a></td>
                <td><a th:href="@{/remove-
                  author/{id}(id={author.id})}"
                  class="btn btn-danger"><i class="fas
                    fa-user-times ml-2"></i></a></td>
              </tr>
            </tbody>
          </table>

          <div th:if="{authors.totalPages > 0}" class="pagination"
            th:each="pageNumber : {pageNumbers}">
            <a th:href="@{/authors(size={authors.size},
              page={pageNumber})}"
              th:text="{pageNumber}"
              th:class="{pageNumber==authors.number + 1} ?
                active"></a>

            <
              <
                <div>
                  </div>
                </div>
              </div>
            </div>
          </div>

```

</div>  
>

<div th:insert="comman/footer :: footer">Abilasha</div>

```
</body>
```

```
</html>
```

### List-categories.html:

```
<!DOCTYPE html>
```

```
<html xmlns:th="http://www.thymeleaf.org">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta http-equiv="x-ua-compatible" content="ie=edge">
```

```
<title>All Categories</title>
```

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

```
<link rel="stylesheet"
```

```
    href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
```

```
<link rel="stylesheet"
```

```
    href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
```

```
</head>
```

```
<body>
```

```
    <div th:insert="comman/header :: header"></div>
```

```
    <div class="container my-2">
```

```
        <div th:switch="{categories}" class="container my-5">
```

```
            <p class="my-5">
```

```
                <a href="/addCategory" class="btn btn-dark"> <i
```

```
                    class="fas fa-user-plus ml-2"> Add Category
```

```
</i></a>&nbsp;&nbsp;&nbsp;<a
```

```
    href="/export/all-category" class="btn btn-info"> <i
```

```
    class="fas fa-file-csv ml-2"> Export CSV </i></a>
```

```
</p>
```

```
        <div class="col-md-12">
```

```
            <h2 th:case="null">No record found !!</h2>
```

```
            <div th:case="*">
```

```
                <table class="table table-bordered">
```

```
                    <thead>
```

```
                        <tr>
```

```
                            <th>Category Name</th>
```

```
                            <th>Edit</th>
```

```
                            <th>Delete</th>
```

```
                        </tr>
```

```
                    </thead>
```

```
                    <tbody>
```

```
                        <tr th:each="category : {categories}">
```

```
                            <td th:text="{category.name}"></td>
```

```
                            <td><a
```

```
th:href="@{/updateCategory/{id}(id={category.id})}" f user-times ml-
```

```
class="fas fa-user-edit ml-2"></i></a></td>
```

```
a 2"></i></a></td>
```

```
-
```

```
category/{id}(id={category.id})}"
```

<td><a

class="btn btn-warning"><i

th:href="@{/re-move-

class="btn btn-danger"><i class="fas fa-ban" style="color: red; font-size: 1.2em; margin-left: 5px;">

```

</tr>
</tbody>
</table>
</div>
</div>
</div>
</div>
<div th:insert="comman/footer :: footer"></div>
</body>

```

```

</html>

```

### List-books.html:

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
<head>
<meta charset="UTF-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>All Books</title>

<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">

</head>
<body>
  <div th:insert="comman/header :: header"></div>
  <div class="container my-2">

    <div th:switch="{books}" class="container my-5">
      <p class="my-5">
        <a href="/add" class="btn btn-dark"> <i
          class="fas fa-user-plus ml-2"> Add Book
        </i></a>&nbsp;&nbsp;&nbsp;<a
          href="/export/all-book" class="btn btn-info"> <i
            class="fas fa-file-csv ml-2"> Export CSV </i></a>
      </p>

      <div class="col-md-12">
        <h2 th:case="null">No record found !!</h2>
        <div th:case="*">

          <table class="table table-bordered">
            <thead>
              <tr>

```

```

</tr>

```

<th>ISBN</th>  
<th>Book Name</th>  
<th>Serial Name</th>  
<th>Description</th>  
<th>Detail</th>  
<th>Edit</th>  
<th>Delete</th>



```

</thead>
<tbody>
  <tr th:each="book : ${books}">
    <td th:text="${book.isbn}"></td>
    <td th:text="${book.name}"></td>
    <td th:text="${book.serialName}"></td>
    <td th:text="${book.description}"></td>
    <td><a
th:href="@{/book/{id}(id=${book.id})}"
class="btn btn-info"><i class="fas
fa-marker ml-2"></i></a></td>
    <td><a
th:href="@{/update/{id}(id=${book.id})}"
class="btn btn-warning"><i
class="fas fa-user-edit ml-2"></i></a></td>
    <td><a th:href="@{/remove-
book/{id}(id=${book.id})}"
class="btn btn-danger"><i class="fas
fa-user-times ml-2"></i></a></td>
  </tr>
</tbody>
</table>

<div th:if="${books.totalPages > 0}" class="pagination"
  th:each="pageNumber : ${pageNumbers}">
  <a th:href="@{/books(size=${books.size},
page=${pageNumber})}"
th:text=${pageNumber}
th:class="${pageNumber==books.number + 1} ?
active"></a>
  </div>
</div>
</div>
</div>
</div>
<div th:insert="comman/footer :: footer"></div>
</body>

```

&lt;/html&gt;

**List-publishers.html:**

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
<head>
<meta charset="UTF-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>All Publishers</title>

<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
  href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"

```

href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">

</head>

```

<body>
  <div th:insert="comman/header :: header"></div>
  <div class="container my-2">

    <div th:switch="{publishers}" class="container my-5">
      <p class="my-5">
        <a href="/addPublisher" class="btn btn-dark"> <i
          class="fas fa-user-plus ml-2"> Add Publisher </i></a>

        &nbsp;&nbsp;&nbsp;<a
          href="/export/all-publisher" class="btn btn-info"> <i
            class="fas fa-file-csv ml-2"> Export CSV </i></a>

      </p>

      <div class="col-md-12">
        <h2 th:case="null">No record found !!</h2>
        <div th:case="*">
          <table class="table table-bordered">
            <thead>
              <tr>
                <th>Publisher Name</th>
                <th>Edit</th>
                <th>Delete</th>
              </tr>
            </thead>
            <tbody>

              <tr th:each="publisher : {publishers}">
                <td th:text="{publisher.name}"></td>
                <td><a
                  th:href="@{/updatePublisher/{id}(id={publisher.id})}"
                  class="btn btn-warning"><i
                    class="fas fa-user-edit ml-2"></i></a></td>

                <td><a
                  th:href="@{/remove-
                    publisher/{id}(id={publisher.id})}"
                    class="btn btn-danger"><i class="fas
                    fa-user-times ml-2"></i></a></td>

              </tr>
            </tbody>
          </table>

        </div>
      </div>
    </div>

    <div th:insert="comman/footer :: footer"></div>
  </body>

</html>

Add-category.html:

<!DOCTYPE html>

```

<html xmlns:th="http://www.thymeleaf.org">

```

<head>
<meta charset="utf-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>Add Category</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
</head>

<body>
  <div th:insert="comman/header :: header"></div>
  <div class="container my-5">
    <h3>Add Category</h3>
    <div class="card">
      <div class="card-body">
        <div class="col-md-10">
          <form action="#" th:action="@{/add-category}"
                th:object="${category}" method="post">
            <div class="row">

              <div class="form-group col-md-8">
                <label for="name" class="col-form-
label">Category Name</label> <input
                                type="text" th:field="*{name}"
class="form-control" id="name"
                                placeholder="Category Name" />

              </div>

              <div class="col-md-6">
                <input type="submit" class="btn btn-
success" value=" Submit ">

              </div>

            </div>
          </form>
        </div>
      </div>
    </div>
  </div>
  <div th:insert="comman/footer :: footer"></div>
</body>

```

```
</html>
```

### Login.html:

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">

<head>
<meta charset="utf-8">

```

```
<meta http-equiv="x-ua-compatible" content="ie=edge">  
<title>Login</title>
```

```

<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
</head>

<body>
  <div th:insert="comman/header :: header"></div>
  <br>
  <br>
  <br>
  <br>
  <div class="container">
    <div class="row">
      <div class="col-md-6 col-md-offset-3">

        <h1>Admin Login Page</h1>
        <form th:action="@{/login}" method="post">

          <!-- error message -->
          <div th:if="${param.error}">
            <div class="alert alert-danger">Invalid username or
              password.</div>
          </div>

          <!-- logout message -->
          <div th:if="${param.logout}">
            <div class="alert alert-info">You have been logged
out.</div>

          </div>

          <div class="form-group">
            <label for="username"> Username </label> : <input
type="text"
name="username"
autofocus="autofocus">
              class="form-control" id="username"
              placeholder="Enter Email ID"
            </div>

          <div class="form-group">
            <label for="password">Password</label>: <input
type="password"
control"
              id="password" name="password" class="form-
              placeholder="Enter Password" />
            </div>

          <div class="form-group">
            <input type="submit" value="Login" class="btn btn-primary"
              id="login-submit"

```



-sm-offset-3">  
<input type="submit" name="login-submit"

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col

value="Log In" />

</div>

</div>

</div>

</form>

</div>

</div>

</div>

<div th:insert="comman/footer :: footer"></div>

</body>

</html>

### Add-book.html:

<!DOCTYPE html>

<html xmlns:th="http://www.thymeleaf.org">

<head>

<meta charset="utf-8">

<meta http-equiv="x-ua-compatible" content="ie=edge">

<title>Add Book</title>

<meta name="viewport" content="width=device-width, initial-scale=1">

<link rel="stylesheet"

href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">

<link rel="stylesheet"

href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">

</head>

<body>

<div th:insert="comman/header :: header"></div>

<div class="container my-5">

<h3>Add Book</h3>

<div class="card">

<div class="card-body">

<div class="col-md-10">

<form action="#" th:action="@{/add-book}" th:object="\${book}"  
method="post">

<div class="row">

<div class="form-group col-md-8">

<label for="isbn" class="col-form-

label">ISBN</label> <input

type="text" th:field="\*{isbn}"

class="form-control" id="isbn"

placeholder="ISBN" /> <span

th:if="\${#fields.hasErrors('isbn')}"

th:errors="\*{isbn}"></span>

</div>

label">Book Name</label> <input

```
<div class="form-group col-md-8">
```

```
  <label
```

```
    for="name"
```

```
    >
```

```
    class="control-label"
```

```
    l-form-
```

```
    type="text"
```

```
  </label>
```

```
  <input th:field="name" type="text">
```

```
  </input>
```

```
</div>
```

```
class="form-control" id="name"
```

```
placeholder="Book Name" />
```

```
</div>
```

```
label">SerialName
```

```
th:field="*{serialName}"
```

```
id="serialName" placeholder="Serial Name" />
```

```
<div class="form-group col-md-8">
```

```
<label for="serialName" class="col-form-
```

```
</label> <input type="text"
```

```
class="form-control"
```

```
</div>
```

```
label">Description</label>
```

```
id="description" placeholder="Description" />
```

```
<div class="form-group col-md-8">
```

```
<label for="description" class="col-form-
```

```
<input type="text" th:field="*{description}"
```

```
class="form-control"
```

```
</div>
```

```
label">Category</label> <select
```

```
class="form-control">
```

```
${categories}"
```

```
th:text="${category.name}"></option>
```

```
<div class="form-group col-md-8">
```

```
<label for="category" class="col-form-
```

```
th:field="*{categories}"
```

```
<option th:each="category:
```

```
th:value="${category.id}"
```

```
</select>
```

```
</div>
```

```
label">Author</label> <select
```

```
control">
```

```
th:value="${author.id}"
```

```
<div class="form-group col-md-8">
```

```
<label for="author" class="col-form-
```

```
th:field="*{authors}" class="form-
```

```
<option th:each="author: ${authors}"
```

```
th:text="${author.name}"></option>
```

```
</select>
```

```
</div>
```

```
${publishers}"
```

```
label">Publisher</label>
```

class="form-control">

"

```
<div class="form-group  
col-md-8">
```

```
  <label  
    for="publisher"  
    class="col-form-
```

```
  <select  
    th:field="*{publis  
    hers}"
```

```
    <option
```

```
      th:
```

```
      ea
```

```
      ch
```

```
      ="
```

```
      pu
```

```
      bli
```

```
      sh
```

```
      er:
```

```
      th:
```

```
      va
```

```
      lu
```

```
      e=
```

```
      "$
```

```
      {p
```

```
      ub
```

```
      lis
```

```
      he
```

```
      r.i
```

```
      d}
```

```

th:text="${publisher.name}"></option>
                                </select>
                                </div>

                                <div class="col-md-6">
                                    <input type="submit" class="btn btn-
success" value=" Submit ">

                                </div>

                                </div>
                                </form>
                                </div>
                                </div>
                                </div>
                                </div>
                                <div th:insert="comman/footer :: footer"></div>
</body>

```

```
</html>
```

### Add-publisher.html:

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">

<head>
<meta charset="utf-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>Add Publisher</title>
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">
</head>

<body>
    <div th:insert="comman/header :: header"></div>
    <div class="container my-5">
        <h3>Add Publisher</h3>
        <div class="card">
            <div class="card-body">
                <div class="col-md-10">
                    <form action="#" th:action="@{/add-publisher}"
                        th:object="${publisher}" method="post">
                        <div class="row">

                            Name" />

                            label">Publisher Name</label>

                            class="form-control"

```

```
<div class="form-group col-  
md-8">  
  <label for="name"  
    class="col-form-  
  
  <input  
  
    type="te
```

```
xt" th:field="*{name}" id="name"  
  
placeholder="Publisher
```

```
</div>
```



```

                                <div class="col-md-6">
                                    <input type="submit" class="btn btn-
success" value=" Submit ">

```

```

                                </div>

```

```

                                </div>

```

```

                                </form>

```

```

                                </div>

```

```

                                </div>

```

```

                                </div>

```

```

                                </div>

```

```

                                <div th:insert="comman/footer :: footer"></div>

```

```

</body>

```

```

</html>\

```

### List-book.html:

```

<!DOCTYPE html>

```

```

<html xmlns:th="http://www.thymeleaf.org">

```

```

<head>

```

```

<meta charset="UTF-8">

```

```

<meta http-equiv="x-ua-compatible" content="ie=edge">

```

```

<title>All Books</title>

```

```

<meta name="viewport" content="width=device-width, initial-scale=1">

```

```

<link rel="stylesheet"

```

```

    href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">

```

```

<link rel="stylesheet"

```

```

    href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">

```

```

</head>

```

```

<body>

```

```

    <div th:insert="comman/header :: header"></div>

```

```

    <div class="container my-2">

```

```

        <div class="card">

```

```

            <div class="card-body">

```

```

                <div class="container my-5">

```

```

                    <div class="col-md-12">

```

```

                        <div>

```

```

                            <table class="table table-striped table-responsive-

```

```

md">

```

```

                                <thead>

```

```

                                    <tr>

```

```

                                </tr>

```

<tbody>	<th>ISBN</th>
	<th>Category Name</th>
	<th>Book Name</th>
	<th>Author Name</th>
	<th>Publisher Name</th>
	<th>Serial Name</th>
	<th>Description</th>

&lt;tr&gt;

&lt;td

th:text="\${book.isbn}"&gt;&lt;/td&gt;

&lt;td

th:text="\${book.categories[0].name}"&gt;&lt;/td&gt;

&lt;td

th:text="\${book.name}"&gt;&lt;/td&gt;

&lt;td

th:text="\${book.authors[0].name}"&gt;&lt;/td&gt;

&lt;td

th:text="\${book.publishers[0].name}"&gt;&lt;/td&gt;

&lt;td

th:text="\${book.serialName}"&gt;&lt;/td&gt;

&lt;td

th:text="\${book.description}"&gt;&lt;/td&gt;

&lt;/tr&gt;

&lt;/tbody&gt;

&lt;/table&gt;

&lt;/div&gt;

&lt;/div&gt;

&lt;/div&gt;

&lt;/div&gt;

&lt;/div&gt;

&lt;/div&gt;

&lt;div th:insert="comman/footer :: footer"&gt;&lt;/div&gt;

&lt;/body&gt;

&lt;/html&gt;

**Footer.html:**

&lt;!DOCTYPE html&gt;

&lt;html xmlns:th="http://www.thymeleaf.org"&gt;

&lt;head&gt;

&lt;meta charset="UTF-8"&gt;

&lt;meta http-equiv="x-ua-compatible" content="ie=edge"&gt;

&lt;title&gt;Footer&lt;/title&gt;

&lt;meta name="viewport" content="width=device-width, initial-scale=1"&gt;

&lt;link rel="stylesheet"

href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css"&gt;

&lt;link rel="stylesheet"

href="https://use.fontawesome.com/releases/v5.4.1/css/all.css"&gt;

&lt;/head&gt;

&lt;body&gt;

&lt;!-- Footer --&gt;

&lt;footer class="page-footer font-small blue pt-4"&gt;

&lt;!-- Copyright --&gt;

&lt;div class="footer-copyright text-center py-3"&gt;

Done by R Abilasha

&lt;/div&gt;

<!-- Copyright -->

```

</footer>
<!-- Footer -->
</body>
</html>

```

### Header.html:

```

<!DOCTYPE html>
<html xmlns:th="http://www.thymeleaf.org">
<head>
<meta charset="UTF-8">
<meta http-equiv="x-ua-compatible" content="ie=edge">
<title>Header</title>

<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet"
      href="https://stackpath.bootstrapcdn.com/bootstrap/4.1.3/css/bootstrap.min.css">
<link rel="stylesheet"
      href="https://use.fontawesome.com/releases/v5.4.1/css/all.css">

</head>

<body>

  <nav th:fragment="header"
        class="navbar navbar-expand-sm bg-info navbar-light">

    <a class="navbar-brand" href="#">Library Management System</a>
    <button class="navbar-toggler" type="button" data-toggle="collapse"
            data-target="#navbarNav">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="navbarNav">
      <ul class="navbar-nav mr-auto">
        <li class="nav-item" sec:authorize="isAuthenticated()"><a
          class="nav-link" href="/books">Books</a></li>
        <li class="nav-item" sec:authorize="isAuthenticated()"><a
          class="nav-link" href="/authors">Authors</a></li>
        <li class="nav-item" sec:authorize="isAuthenticated()"><a
          class="nav-link" href="/publishers">Publisher</a></li>
        <li class="nav-item" sec:authorize="isAuthenticated()"><a
          class="nav-link" href="/categories">Category</a></li>
      </ul>
      <ul class="navbar-nav">
        <li class="nav-item" sec:authorize="isAuthenticated()"><a
          class="nav-link" th:href="@{/logout}">Logout</a></li>
      </ul>
    </div>
  </nav>

</body>

```

</ul>

**OUTPUT:**

Browser tabs: PHP, Add Library Details

Address bar: localhost:3000

### Add Library Details

Hint

Account No.:

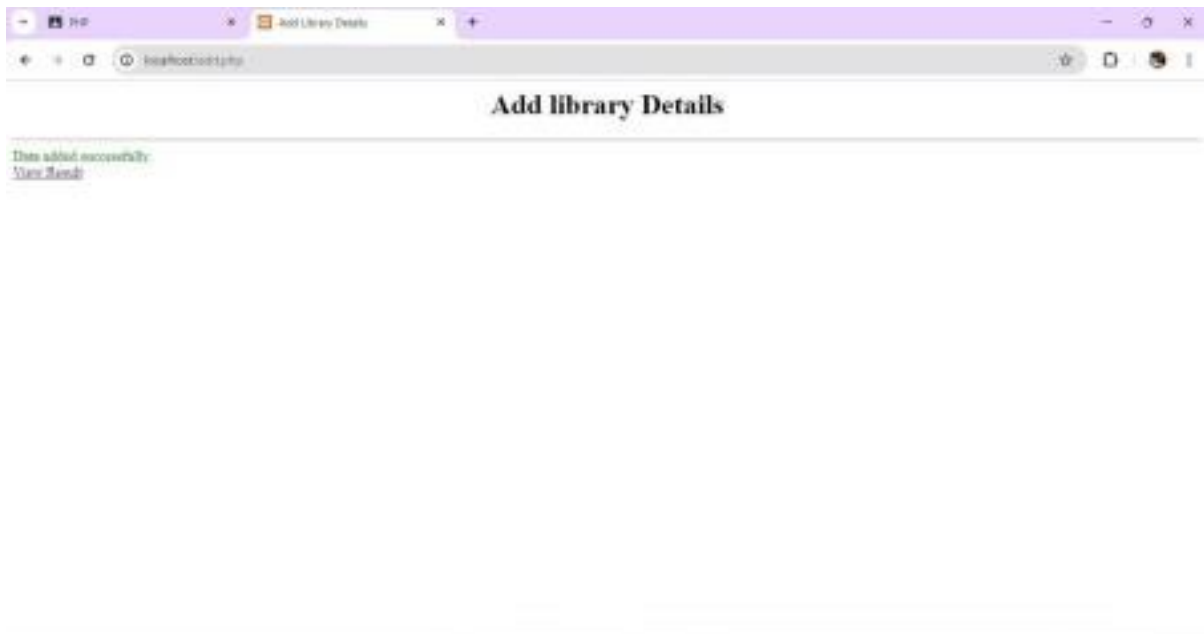
Title:

Author:

Publisher:

Edition:

Price:



Browser tabs: PHP, Add Library Details

Address bar: localhost:3000

### Add library Details

Data added successfully.

[View Details](#)

Page

Homepage

+

localhost:3000

Library Details

Add New Data

Account No.	Title	Author	Publisher	Edition	Price	Edit   Delete
1	AcEE	chderrch	AcEkg	2001	1000	Edit   Delete
1	AcEE	chderrch	AcEkg	2001	1000	Edit   Delete

RESULT:

Thus, the library management system has been created successfully.



## PHP - Bank Application

### Aim:

Program to develop a Banking application accessing a database using Servlet.

### Procedure:

Relations using MYSQL for a banking application given below enforcing primary key and foreign key constraints:

CUSTOMER (CID, CNAME)

ACCOUNT (ANO, ATYPE, BALANCE, CID)

An account can be a savings account or a current account. Check ATYPE in 'S' or 'C'.

A customer can have both types of accounts.

TRANSACTION (TID, ANO, TTYPE, TDATE, TAMOUNT)

TTYPE can be 'D' or 'W'

D- Deposit; W – Withdrawal

1. Open MySQL.
2. Create a database.

```
mysql> create database banking;  
Query OK, 1 row affected (0.05 sec)
```

3. Connect to the database.

```
mysql> use banking;  
Database changed
```

4. Create the following tables:

```
mysql> create table customer (cid integer, cname varchar(20),  
-> primary key (cid));  
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> create table account (ano integer, atype varchar(1),  
-> balance integer, cid integer references customer (cid),  
-> check (atype in ('S', 'C')), primary key (ano));  
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> create table transaction (tid integer,  
-> ano integer references account(ano),  
-> ttype varchar(1), adate date, tamount integer,  
-> check (ttype in ('D', 'W')), primary key (tid));
```

Query OK, 0 rows affected (0.06 sec)

## index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Banking Application</title>
</head>
<body>
  <h1 align="center">Banking Application</h1>
  <hr />
  <a href="Customer.html">Customer Details</a>
  <br />
  <br />
  <a href="Account.html">Account Details</a>
</body>
</html>
```

## Customer.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset="ISO-8859-1">
<title>Customer Details</title>
</head>
<body>
  <h1 align="center">Customer Details</h1>
  <hr />
  <form action="AddCustomer" method="post">
    <table>
      <tr>
        <td>Customer Id. :</td>
        <td><input type="text" name="cid"></td>
      </tr>
      <tr>
        <td>Customer Name :</td>
        <td><input type="text" name="cname"></td>
      </tr>
      <tr>
        <td colspan="2" align="center"><input type="submit"
          value="Add Customer"></td>
      </tr>
    </table>
```

```

        <br /> <a href="ViewCustomers">View All Customers</a>
    </form>
</body>
</html>

```

### AddCustomer.java

```

import java.io.IOException; import
java.io.PrintWriter; import
java.sql.Connection; import
java.sql.DriverManager;
import java.sql.PreparedStatement;

import javax.servlet.ServletException; import
javax.servlet.annotation.WebServlet; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class AddCustomer
 */
@WebServlet("/AddCustomer")
public class AddCustomer extends HttpServlet { private static
    final long serialVersionUID = 1L; Connection conn = null;
    PreparedStatement ps = null;

    /**
     * @see HttpServlet#doPost(HttpServletRequest request,
    HttpServletResponse
     * response)
     */
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
    throws ServletException, IOException {
        // TODO Auto-generated method stub
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html>");
        out.println("<head><title>Add Customer Details</title></head>");
        out.println("<body>");
        out.println("<h1 align='center'>Add Customer Details</h1>");
        out.println("<hr />");
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            String URL = "jdbc:mysql://localhost:3306/banking";
            conn = DriverManager.getConnection(URL, "root", "admin");
            ps = conn.prepareStatement("insert customer values (?, ?)"); ps.setInt(1,
            Integer.parseInt(request.getParameter("cid"))); ps.setString(2,
            request.getParameter("cname"));
            int res = ps.executeUpdate();
            if (res != 0)
                out.println("Customer    Details    Inserted

```

Successfully...");

211701010

```

        else
            out.println("Customer Details Insertion Failure...");
            ps.close();
            conn.close();
        } catch (Exception e) {
            out.println(e);
        }

        out.println("<br />");
        out.println("<a href='Customer.html'>Back</a>");
        out.println("</body></html>");
    }

}

```

### ViewCustomers.java

```

import java.io.IOException; import
java.io.PrintWriter; import
java.sql.Connection; import
java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;

import javax.servlet.ServletException; import
javax.servlet.annotation.WebServlet; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class ViewCustomers
 */
@WebServlet("/ViewCustomers")
public class ViewCustomers extends HttpServlet { private static
    final long serialVersionUID = 1L; Connection conn = null;
    PreparedStatement ps = null;
    ResultSet rs = null;

    /**
     * @see HttpServlet#doPost(HttpServletRequest request,
HttpServletResponse
     * response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // TODO Auto-generated method stub
        response.setContentType("text/html"); PrintWriter
        out = response.getWriter(); out.println("<html>");
        out.println("<head><title>View All Customer
Details</title></head>"); out.println("<body>");
        out.println("<h1 align='center'>View All Customer Details</h1>");
    }
}

```

```
out.println("<hr />");
```

```

try {
    Class.forName("com.mysql.cj.jdbc.Driver");
    String URL = "jdbc:mysql://localhost:3306/banking";
    conn = DriverManager.getConnection(URL, "root", "admin"); ps =
    conn.prepareStatement("select * from customer order bycid");
    rs = ps.executeQuery(); out.println("<table
border='1'>"); out.println("<tr>");
    out.println("<td>Customer Id.</td>");
    out.println("<td>Customer Name</td>");
    out.println("<td>Edit</td>");
    out.println("<td>Delete</td>");
    out.println("</tr>");
    while (rs.next()) {
        out.println("<tr>");
        out.println("<td>" + rs.getInt("cid") + "</td>"); out.println("<td>"
+ rs.getString("cname") + "</td>");out.println("<td><a
href='EditCustomer?cid=" + rs.getInt("cid") + "'>Edit</a></td>");
        out.println("<td><a href='DeleteCustomer?cid=" + rs.getInt("cid")
+ "'>Delete</a></td>"); out.println("</tr>");
    }
    out.println("</table>");
    ps.close();
    conn.close();
} catch (Exception e) {
    out.println(e);
}
out.println("<br />");
out.println("<a href='Customer.html'>Back</a>");
out.println("</body></html>");
}

```

```

}

```

### EditCsutomer.java

```

import java.io.IOException; import
java.io.PrintWriter; import
java.sql.Connection; import
java.sql.DriverManager;
import java.sql.PreparedStatement;
import java.sql.ResultSet;

import javax.servlet.ServletException; import
javax.servlet.annotation.WebServlet; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class EditCustomer
 */
@WebServlet("/EditCustomer")

```



```
public class EditCustomer extends HttpServlet { private static  
    final long serialVersionUID = 1L;Connection conn = null;
```

```
PreparedStatement ps = null;
ResultSet rs = null;
```

```
/**
```

```
 * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse
 *      response)
 */
```

```
protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
```

```
    // TODO Auto-generated method stub
```

```
    response.setContentType("text/html");
```

```
    PrintWriter out = response.getWriter();
```

```
    out.println("<html>");
```

```
    out.println("<head><title>Edit Customer Details</title></head>");
```

```
    out.println("<body>");
```

```
    out.println("<h1 align='center'>Edit All Customer Details</h1>");
```

```
    out.println("<hr />");
```

```
    try {
```

```
        Class.forName("com.mysql.cj.jdbc.Driver");
```

```
        String URL = "jdbc:mysql://localhost:3306/banking";
```

```
        conn = DriverManager.getConnection(URL, "root", "admin");ps =
```

```
        conn.prepareStatement("select * from customer where cid = ?");
```

```
        ps.setInt(1,Integer.parseInt(request.getParameter(("cid"))));rs =
```

```
        ps.executeQuery();
```

```
        rs.next();
```

```
        out.println("<form action='UpdateCustomer' method='post'>");
```

```
        out.println("<table>");
```

```
        out.println("<tr>"); out.println("<td>Customer Id.
```

```
        :</td>");
```

```
        out.println("<td><input type='text' name='cid' value='" + rs.getInt("cid")
```

```
        + "' readonly>></td>"); out.println("</tr>");
```

```
        out.println("<tr>");
```

```
        out.println("<td>Customer Name :</td>"); out.println("<td><input
```

```
        type='text' name='cname' value='" + rs.getString("cname") + "'></td>");
```

```
        out.println("</tr>");
```

```
        out.println("<tr>");
```

```
        out.println("<td colspan='2' align='center'><input type='submit'
```

```
        value='Update Customer'></td>"); out.println("</tr>");
```

```
        out.println("</table>");
```

```
        out.println("</form>");
```

```
        ps.close();
```

```
        conn.close();
```

```
    } catch (Exception e) {
```

```
        out.println(e);
```

```
    }
```

```
    out.println("<br />");
```

```
    out.println("<a href='ViewCustomers'>Back</a>");
```

```
    out.println("</body></html>");
```

```
}
```

```
}
```

**UpdateCustomer.java**

```
import java.io.IOException; import
```

```

java.io.PrintWriter; import
java.sql.Connection; import
java.sql.DriverManager;
import java.sql.PreparedStatement;

import javax.servlet.ServletException; import
javax.servlet.annotation.WebServlet; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;

/**
 * Servlet implementation class UpdateCustomer
 */
@WebServlet("/UpdateCustomer")
public class UpdateCustomer extends HttpServlet { private static
    final long serialVersionUID = 1L; Connection conn = null;
    PreparedStatement ps = null;
    /**
     * @see HttpServlet#doPost(HttpServletRequest request,
    HttpServletResponse response)
     */
    protected void doPost(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // TODO Auto-generated method stub
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html>");
        out.println("<head><title>Update Customer Details</title></head>");
        out.println("<body>");
        out.println("<h1 align='center'>Update Customer Details</h1>");
        out.println("<hr />");
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            String URL = "jdbc:mysql://localhost:3306/banking";
            conn = DriverManager.getConnection(URL, "root", "admin"); ps =
            conn.prepareStatement("update customer set cname = ?where cid = ?");
            ps.setString(1, request.getParameter("cname")); ps.setInt(2,
            Integer.parseInt(request.getParameter("cid"))); int res =
            ps.executeUpdate();
            if (res != 0)
                out.println("Customer Details Updated
                Successfully...");
            else
                out.println("Customer Details Updation Failure...");
            ps.close();
            conn.close();
        } catch (Exception e) {
            out.println(e);
        }

        out.println("<br />");
    }
}

```

```
out.println("<a href='ViewCustomers'>Back</a>");  
out.println("</body></html>");
```

}

}

**DeleteCustomer.java**

```

import java.io.IOException; import
java.io.PrintWriter; import
java.sql.Connection; import
java.sql.DriverManager;
import java.sql.PreparedStatement;
import javax.servlet.ServletException; import
javax.servlet.annotation.WebServlet; import
javax.servlet.http.HttpServlet; import
javax.servlet.http.HttpServletRequest;
import javax.servlet.http.HttpServletResponse;
/**
 * Servlet implementation class DeleteCustomer
 */
@WebServlet("/DeleteCustomer")
public class DeleteCustomer extends HttpServlet { private static
    final long serialVersionUID = 1L; Connection conn = null;
    PreparedStatement ps = null;
    /**
     * @see HttpServlet#doGet(HttpServletRequest request, HttpServletResponse response)
     */
    protected void doGet(HttpServletRequest request, HttpServletResponse response)
throws ServletException, IOException {
        // TODO Auto-generated method stub
        response.setContentType("text/html");
        PrintWriter out = response.getWriter();
        out.println("<html>");
        out.println("<head><title>Delete Customer Details</title></head>");
        out.println("<body>");
        out.println("<h1 align='center'>Delete Customer Details</h1>");
        out.println("<hr />");
        try {
            Class.forName("com.mysql.cj.jdbc.Driver");
            String URL = "jdbc:mysql://localhost:3306/banking";
            conn = DriverManager.getConnection(URL, "root", "admin");
            ps = conn.prepareStatement("delete from customer where cid =
?");
            ps.setInt(1, Integer.parseInt(request.getParameter("cid")));
            int res = ps.executeUpdate();
            if (res != 0)
                out.println("Customer Details Deleted uccessfully...");
            else
                out.println("Customer Details Deletion Failure...");
            ps.close();
            conn.close();
        } catch (Exception e) {
            out.println(e);
        }
    }

```

```
out.println("<br />");
```

```
        out.println("<a href='ViewCustomers'>Back</a>");  
        out.println("</body></html>");  
    }  
}
```

## OUTPUT:



The screenshot shows a web browser window with the address bar displaying 'localhost/bank/add.html'. The page title is 'Add Bank Account Details'. Below the title, there is a link labeled 'Home'. The form contains the following labels and input fields:

- Account No : [input field]
- Customer Id : [input field]
- Customer Name : [input field]
- Customer Place : [input field]
- Customer Phone : [input field]
- Account Type : [input field]
- Account Status : [input field]

At the bottom of the form, there is an 'Add' button.



The screenshot shows a web browser window with the address bar displaying 'localhost/bank/add.php'. The page title is 'Add Bank Details'. Below the title, there is a green message that says 'Data added successfully.' and a link labeled 'View Result'.



localhost:8090/ServletBanking/AddBankDetails

### Add Bank Details

[Add New Data](#)

AccId	Chid	Name	Place	Phone	AccType	AccStatus	Edit	Delete
1	10	aditya	ahmed	9987654321	cur	act	<a href="#">Edit</a>	<a href="#">Delete</a>
2	10	Tina	Della	9876543210	cur	act	<a href="#">Edit</a>	<a href="#">Delete</a>
1	11	Gokul	Chennai	9876543210	cur	act	<a href="#">Edit</a>	<a href="#">Delete</a>

Add Customer Details

localhost:8090/ServletBanking/AddCustomer

### Add Customer Details

Customer Details Inserted Successfully...

[Back](#)

localhost:8090/ServletBanking/EditEmployeeDetails

### Edit Employee Details

[Home](#)

AccountId :

Customer ID :

Name :

Place :

Phone :

Account Type :

Account Status :

## PHP – Employee Details

### Aim:

PHP program for Employee Details, which includes EmpID, Name, Designation, Salary, DOJ, etc., to connect with the database and execute queries to retrieve and update data.

### Procedure:

Relations using MYSQL for a banking application given below enforcing primary key and foreign key constraints:

EMPDETAILS (EMPID, ENAME, DESIG, DEPT, DOJ, SALARY)

1. Open MySQL.

2. Create a database.

```
mysql> create database rec;  
Query OK, 1 row affected (0.05 sec)
```

3. Connect to the database.

```
mysql> use rec;  
Database changed
```

4. Create the following tables:

```
mysql> create table empdetails(empid int primary key,  
-> ename varchar(20), desig varchar(20), dept varchar(20),  
-> doj date, salary int);  
Query OK, 0 rows affected (0.08 sec)
```

**PROGRAM:**

config.php

```

<?php
    $databaseHost = 'localhost';
    $databaseName = 'rec';
    $databaseUsername = 'root';
    $databasePassword = 'admin';
    $mysqli = mysqli_connect($databaseHost, $databaseUsername,
        $databasePassword, $databaseName);

?>

```

index.php

```

<?php
//including the database connection file
include_once("config.php");
//fetching data in descending order (lastest entry first)
$result=mysqli_query($mysqli, "SELECT * FROM empdetails ORDER BY empid DESC");
?>
<html>
<head>
    <title>Homepage</title>
</head>
<body>
    <h1 align="center">Employee Details</h1>
    <hr />
    <a href="add.html">Add New Data</a><br/><br/>
    <table width='100%' border=0>
        <tr bgcolor='#CCCCCC'>
            <td>Employee Id.</td>
            <td>Name</td>
            <td>Designation</td>
            <td>Department</td>
            <td>DOJ</td>
            <td>Salary</td>
            <td>Edit / Delete</td>

        </tr>
    <?php
        while($res = mysqli_fetch_array($result)) { echo
            "<tr>";
            echo "<td>".$res['empid']. "</td>";
            echo "<td>".$res['ename']. "</td>";
            echo "<td>".$res['desig']. "</td>";
            echo "<td>".$res['dept']. "</td>";
            echo "<td>".$res['doj']. "</td>";
            echo "<td>".$res['salary']. "</td>";
            echo "<td><a href='edit.php?empid=$res[empid]'>Edit</a>";
            echo " | <a href='delete.php?empid=$res[empid]'>Delete</a></td>";echo "</tr>";

        }
    ?>
    </table>
</body>

```

</html>

**add.html**

```
<html>

<head>
  <title>Add Employee Details</title>
</head>

<body>
  <h1 align="center">Add Employee Details</h1>
  <hr />
  <a href="index.php">Home</a>
  <br /><br />

  <form action="add.php" method="post" name="form1">
    <table width="25%" border="0">
      <tr>
        <td>Employee Id. : </td>
        <td><input type="text" name="empid"></td>
      </tr>
      <tr>
        <td>Name : </td>
        <td><input type="text" name="ename"></td>
      </tr>
      <tr>
        <td>Designation : </td>
        <td><input type="text" name="desig"></td>
      </tr>
      <tr>
        <td>Department</td>
        <td><input type="text" name="dept"></td>
      </tr>
      <tr>
        <td>DOJ</td>
        <td><input type="text" name="doj"></td>
      </tr>
    </table>
  </form>
</body>
</html>
```

```

        </tr>
        <tr>
            <td>Salary</td>
            <td><input type="text" name="salary"></td>
        </tr>
        <tr>
            <td colspan="2" align="center"><input type="submit"
                name="Submit" value="Add"></td>
        </tr>
    </table>
</form>
</body>

</html>

```

add.php

```

<html>
<head>
    <title>Add Employee Details</title>
</head>
<body>
<?php
//including the database connection file
    include_once("config.php");
    $empid = $_POST['empid'];
    $ename = $_POST['ename'];
    $desig = $_POST['desig'];
    $dept = $_POST['dept'];
    $doj = $_POST['doj'];
    $salary = $_POST['salary'];

    if(isset($_POST['Submit'])) {
        //insert data to database
        $result = mysqli_query($mysqli, "INSERT INTO empdetails values ($empid,
            '$ename','$desig','$dept','$doj',$salary)");
        //display success message
        echo "<h1 align='center'>Add Employee Details</h1>";echo
        "<hr />";
        echo "<font color='green'>Data added successfully.";echo
        "<br/><a href='index.php'>View Result</a>";
    }
?>
</body>
</html>

```

edit.php

```

<?php
// including the database connection file
include_once("config.php");
if(isset($_POST['update']))
{

```

```
$empid = $_POST['empid'];  
$ename = $_POST['ename'];
```

```

$desig = $_POST['desig'];
$dept = $_POST['dept'];
$doj = $_POST['doj'];
$salary = $_POST['salary'];

//updating the table
$result = mysqli_query($mysqli, "UPDATE empdetails SET ename='$ename',
    desig='$desig',dept='$dept',doj='$doj',salary=$salary WHERE empid=$empid");

//redirectig to the display page. In our case, it is index.phpheader("Location:
index.php");

```

```

}
?>

```

```

<?php
echo "<h1 align='center'>Edit Employee Details</h1>";echo "<hr
/>";
//getting id from url
$empid = $_GET['empid'];
//selecting data associated with this particular eid
$result = mysqli_query($mysqli, "SELECT * FROM empdetails WHERE
    empid=$empid");
while($res = mysqli_fetch_array($result))
{
    $empid = $res['empid'];
    $ename = $res['ename'];
    $desig = $res['desig'];
    $dept = $res['dept'];
    $doj = $res['doj'];
    $salary = $res['salary'];
}
?>
<html>
<head>
    <title>Edit Employee Details</title>
</head>
<body>
    <a href="index.php">Home</a>
    <br/><br/>

    <form name="empform" method="post" action="edit.php">
    <table border="0">
    <tr>
    <td>Name : </td>
    <td><input type="text" name="ename" value="<?php echo $ename;?>"></td>
    </tr>
    <tr>
    <td>
    <td>Designation : </td>
    <td><input type="text" name="desig" value="<?php echo $desig;?>"></td>
    </tr>
    <tr>
    <td>
    <td>Department : </td>
    <td><input type="text" name="dept" value="<?php echo $dept;?>"></td>

```



&lt;/tr&gt;

```

<td>DOJ : </td>
<td><input type="text" name="doj" value="<?php echo $doj;?>"></td>
</tr>
<tr>
<td>Salary</td>
<td><input type="text" name="salary" value="<?php echo $salary;?>"></td>
</tr>
<tr>
<td><input type="hidden" name="empid" value="<?php echo $_GET['empid'];?>"></td>
<td><input type="submit" name="update" value="Update"></td>
</tr>
</table>
</form>
</body>
</html>

```

delete.php

```

<?php
//including the database connection file
include("config.php");
//getting id of the data from url
$empid = $_GET['empid'];
//deleting the row from table
$result = mysqli_query($mysqli, "DELETE FROM empdetails WHERE empid=$empid");
//redirecting to the display page (index.php in our case)
header("Location:index.php");
?>

```

## OUTPUT:



The screenshot shows a web browser window with the title 'Add Employee Details'. The address bar shows 'localhost/compross/add.html'. The page content includes a form with the following fields and values:

Field	Value
Employee Id	1122
Name	jagdeep
Designation	officer
Department	computer
DOJ	22/04/2024
Salary	10000

An 'Add' button is located below the Salary field.

localhost/employeadd.php

Add Employee Details

Data added successfully.

[View Result](#)

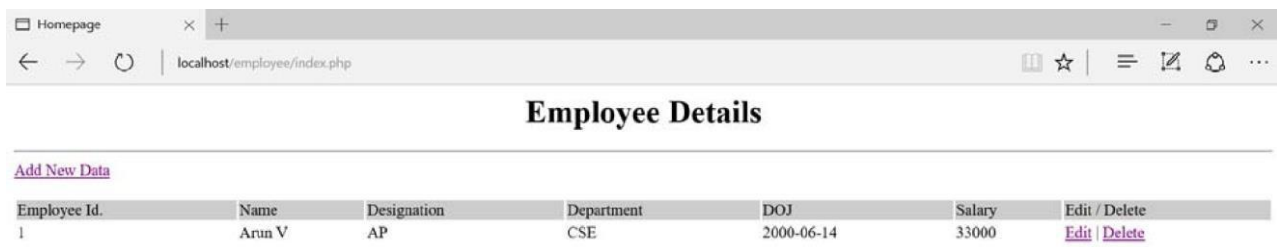
Homepage

localhost/employee/tables.php

Employee Details

[Add New Item](#)

Employee ID	Name	Designation	Department	DOJ	Salary	Edit / Delete
1132	yagugdr	dkyk	dkygha	2024-02-24	10028	<a href="#">Edit</a> / <a href="#">Delete</a>



Employee Id.	Name	Designation	Department	DOJ	Salary	Edit / Delete
1	Arun V	AP	CSE	2000-06-14	33000	<a href="#">Edit</a>   <a href="#">Delete</a>

**Result:**

Thus, the PHP program for employee details has been executed Successfully.

## BOOTSTRAP – WEB PAGE

### Aim:

Program to develop an attractive web pages using Bootstrap.

### Procedure:

1. Ensuring you get a responsive Bootstrap website is as simple as placing the correct metatag inside the head of your web pages:

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

2. The above meta tag is quite self-explanatory in nature. We're setting the width of the page to the width of the device and initially scaling it to 1 — its default size.

3. Apart from this, you're good to go: Bootstrap is responsive by default.

```
<link href="vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">
```

```
<link href="https://fonts.googleapis.com/css?family=Saira+Extra+Condensed:500,700" rel="stylesheet">
```

```
<link href="https://fonts.googleapis.com/css?family=Muli:400,400i,800,800i" rel="stylesheet">
```

```
<link href="vendor/fontawesome-free/css/all.min.css" rel="stylesheet">
```

### PROGRAM:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta charset="utf-8" />
    <meta
      name="viewport"
      content="width=device-width, initial-scale=1, shrink-to-fit=no"
    />
    <meta
      name="description"
      content="Abilasha R portfolio."
    />
    <meta name="author" content="abilasha" />
    <title>Abilasha R- protfolio</title>
    <link rel="icon" type="image/x-icon" href="/favicon.ico" />
    <link rel="stylesheet" href="/bootstrap.min.css" />
    <link rel="stylesheet" href="/main.css" />
    <script>
      function computeDarkTheme(isEnable) {
        if (isEnable) {
          document.body.classList.add("theme-dark");
          document.querySelector("#theme-img").src = "/pic_bulboff.gif";
          localStorage.setItem("theme", "dark");
        }
      }
    </script>
```

```
} else {
```

```

    document.body.classList.remove("theme-dark");
    document.querySelector("#theme-img").src = "./pic_bulbon.gif";
    localStorage.setItem("theme", "light");
  }
}

```

```

window.onload = () => {
  let theme = localStorage.getItem("theme");
  let time = new Date().getHours();

  if (theme === "dark") {
    computeDarkTheme(true);
  } else if ((theme == null && time >= 18) || time <= 5) {
    computeDarkTheme(true);
  } else {
    computeDarkTheme(false);
  }
};

```

```

</script>
</head>
<body data-spy="scroll" data-target=".navbar" data-offset="50">
  <div id="root"></div>
</body>
</html>

```

CSS:

```

@import url('https://fonts.googleapis.com/css?family=Saira+Extra+Condensed:500,700');
/* Globals */

```

```

:root {
  --primary: #bd5d38;
  --gradient: linear-gradient(90deg, #bd5d38, #ff6e36);
}

```

```

html {
  scroll-behavior: smooth;
}

```

```

h1,
h2,
h3,
h4,
h5,
h6,
.h1,
.h2,
.h3,
.h4,
.h5,
.h6 {
  margin-bottom: 0.5rem;
  font-family: 'Saira Extra Condensed', sans-serif;
  font-weight: 700;
  line-height: 1.2;
  color: #343a40;
}

```

```
text-transform: uppercase;  
}
```



```
h1,
.h1 {
  font-size: 6rem;
}
h2,
.h2 {
  font-size: 3.5rem;
}
h3,
.h3 {
  font-size: 2rem;
}
h4,
.h4 {
  font-size: 1.5rem;
}
h5,
.h5 {
  font-size: 1.25rem;
}
h6,
.h6 {
  font-size: 1rem;
}
body {
  position: relative;
  padding-top: 3.375rem;
  color: #6c757d;
  font-family: -apple-system, BlinkMacSystemFont, 'Segoe UI', 'Roboto', 'Oxygen',
    'Ubuntu', 'Cantarell', 'Fira Sans', 'Droid Sans', 'Helvetica Neue',
    sans-serif;
  -webkit-font-smoothing: antialiased;
  -moz-osx-font-smoothing: grayscale;
}
.btn-custom,
.btn-primary {
  border: none;
  background: var(--gradient) !important;
}
p.lead {
  font-size: 1.15rem;
  font-weight: 400;
}
.text-primary {
  color: var(--primary) !important;
}
#sideNav .navbar-nav .nav-link {
  font-weight: 800;
  letter-spacing: 0.05rem;
  text-transform: uppercase;
  transition: 0.3s;
}
```

```
#sideNav .navbar-toggler:focus {
  outline-color: #d48a6e;
}
.social-icons .social-icon {
  display: inline-flex;
  align-items: center;
  justify-content: center;
  height: 3.5rem;
  width: 3.5rem;
  background-color: #495057;
  color: #fff;
  border-radius: 100%;
  font-size: 1.5rem;
  margin-right: 1.5rem;
}
.social-icons .social-icon:last-child {
  margin-right: 0;
}
.social-icons .social-icon:hover {
  background-color: #bd5d38;
}
.dev-icons {
  font-size: 3rem;
}
section.resume-section {
  display: flex;
  align-items: center;
  padding-left: 1rem;
  padding-right: 1rem;
  padding-top: 5rem;
  padding-bottom: 5rem;
  max-width: 75rem;
}
section.resume-section .resume-section-content {
  width: 100%;
}
/* Break */
#sideNav {
  background-size: cover;
  background-position: center center;
}
#sideNav::before {
  content: "";
  position: absolute;

  top: 0;
  left: 0;
  right: 0;
  bottom: 0;
  z-index: -1;
  opacity: 0.98;
}
```

```
.cards {  
  display: grid;
```

```
    grid-gap: 1em;
    grid-template-columns: repeat(auto-fill, minmax(320px, 1fr));
    align-items: start;
  }
  .cards .card .title {
    font-size: 24px;
    text-transform: uppercase;
  }
  .cards .card .card-thumbnail {
    position: relative;
    width: 100%;
    padding-top: 52.26%;
    background-size: cover;
    cursor: pointer;
    transition: all 3s ease;
  }
  .cards .card .card-thumbnail .overlay {
    position: absolute;
    height: 100%;
    width: 100%;
    align-items: center;
    justify-content: center;
    background-color: #f5f5f5;
  }
  .cards .card .card-thumbnail .overlay img {
    transform: translateX(-12%);
  }
  .cards .card .card-thumbnail:hover {
    background-position: bottom center;
  }
  .cards .btn-grp {
    width: 100%;
    display: grid;
    grid-template-columns: repeat(2, 1fr);
    grid-gap: 1em;
  }

#skills .progress {
  height: 1.5rem;
}
#skills .progress .progress-bar {
  background-color: var(--primary) !important;
}
/* Contact */
#contact {
  padding-bottom: 0 !important;
}
#contact .contact-map iframe {
  border-radius: 10px;
  overflow: hidden;
  width: 100%;
  height: 200px;
}
```

}

```
#contact .contact-direct {
  margin-bottom: 15px;
}
#contact .contact-direct .item {
  display: flex;
  align-items: center;
}
#contact .contact-direct .item p {
  border-left: 1px solid lightgrey;
  padding-left: 20px;
  margin: 0;
}
#contact .contact-direct .item span {
  color: #ff6e36;
  font-size: 24px;
  padding: 20px;
}
::-webkit-scrollbar {
  width: 12px;
}
::-webkit-scrollbar-thumb {
  background: linear-gradient(to bottom, transparent, rgba(203, 100, 61, 0.92));
  border-radius: 6px;
}

/* iframe {
  display: none !important;
} */

/* Media query */
@media (max-width: 992px) {
  #sideNav {
    flex-direction: row-reverse;
  }

  #sideNav .navbar-collapse {
    /* display: block; */
    position: absolute;
    top: 0;
    left: 0;
    padding: 0px 1rem;
    padding-top: 18px;
    background: #cb643d;
    box-shadow: rgb(0 0 0 / 40%) 10px 0px 0px 100vw;
  }

  #sideNav .nav-img img {
    top: 0;
    left: 0;
    width: 50px;
    margin: 0px !important;
  }
}
```

}

```

#sideNav .navbar-brand {
  padding: 0px !important;
  margin: 0px !important;
}

#sideNav .navbar-collapse .navbar-nav {
  margin: 15px 0;
  padding: 0 15px;
  /* background: purple; */
}

/* #sideNav .navbar-collapse .navbar-nav {
  margin: 15px 0;
  padding: 0 15px;
  background: white;
  border-top: 1px solid rgba(255, 255, 255, 0.25);
}
#sideNav .navbar-collapse .navbar-nav .nav-link {
  font-weight: 600;
  color: var(--primary);
  padding: 16px 0;
}
#sideNav .navbar-collapse .navbar-nav .nav-link.active {
  font-weight: 700;
}
#about > div > h1 {
  font-size: 5rem;
} */
}

@media (max-width: 768px) {
  /* section.resume-section {
    padding-top: 3rem;
    padding-left: 10px;
    padding-right: 10px;
  } */
  #about > div > h1 {
    font-size: 4rem;
    line-height: 1;
  }
}

@media screen and (max-width: 520px) {
  /* Show 16:9 in mobile devices */
  #about > div > h1 .text-primary {
    font-size: 5rem;
    display: block;
  }
  .codepen-cards .codepen-card {
    padding-top: calc(16 / 9 * 100%);
  }
}

@media screen and (max-width: 400px) {
  .social-icons .social-icon {

```



```
margin: 0px 5px;  
}
```

```
}

@media (max-width: 720px) {
  .social-icons .social-icon {
    margin: 5px;
  }
}

@media (min-width: 768px) {
  section.resume-section {
    min-height: 100vh;
  }
}

@media (min-width: 992px) {
  section.resume-section {
    padding-left: 3rem;
    padding-right: 3rem;
    padding-top: 5rem;
    padding-bottom: 5rem;
  }
}

@media (min-width: 992px) {
  body {
    padding-top: 0;
    padding-left: 17rem;
  }
}

@media (min-width: 992px) {
  #sideNav {
    text-align: center;
    position: fixed;
    top: 0;
    left: 0;
    display: flex;
    flex-direction: column;
    width: 17rem;
    height: 100vh;
  }

  #sideNav .navbar-brand {
    display: flex;
    margin: auto auto 0;
    padding: 0.5rem;
  }

  #sideNav .navbar-brand .img-profile {
    max-width: 10rem;
    max-height: 10rem;
    border: 0.5rem solid rgba(255, 255, 255, 0.2);
  }

  #sideNav .navbar-collapse {
    display: flex;
    align-items: flex-start;
  }
}
```

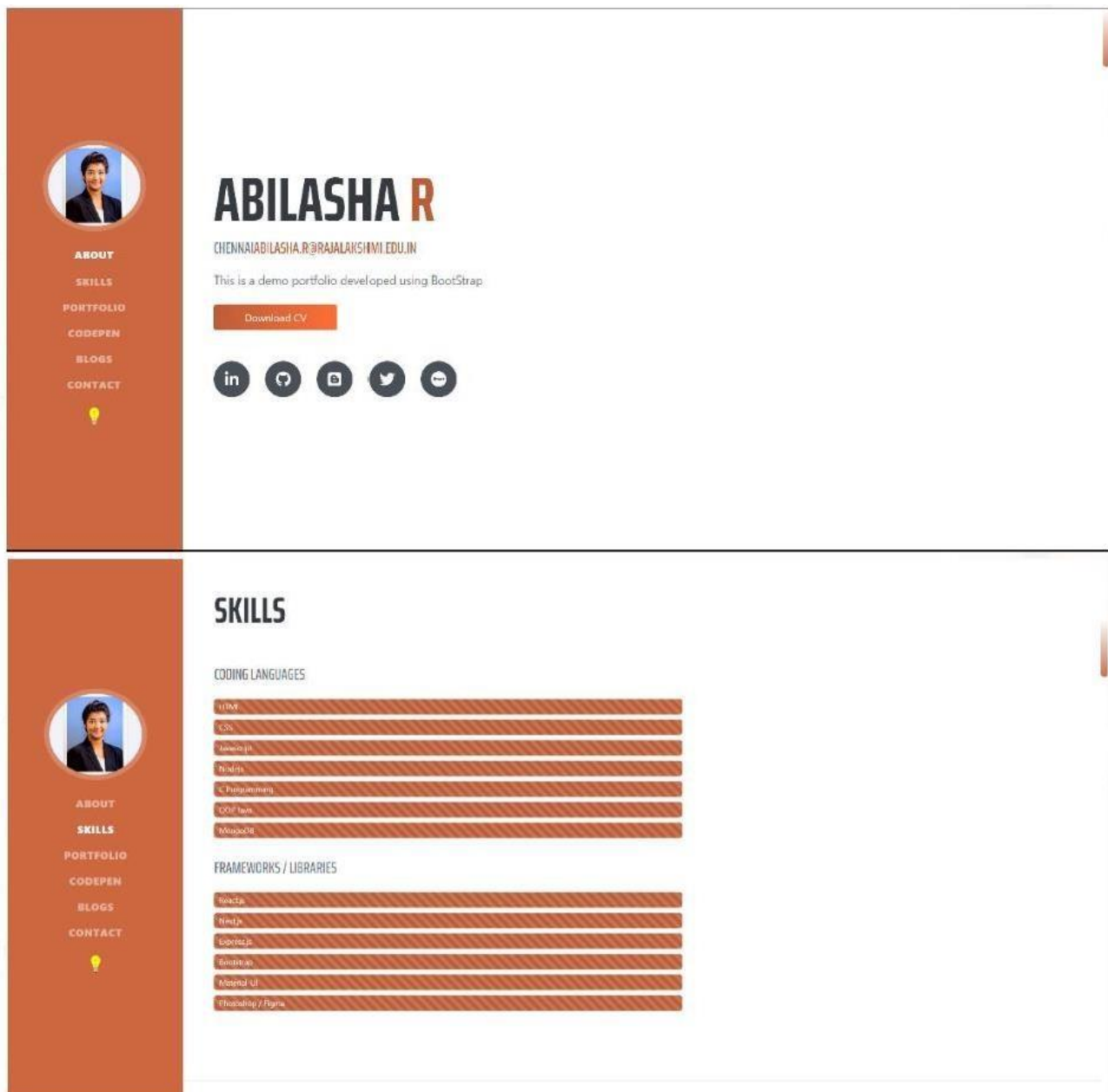
flex-grow: 0;  
width: 100%;

```

margin-bottom: auto;
}
#sideNav .navbar-collapse .navbar-nav {
  flex-direction: column;
  width: 100%;
}
#sideNav .navbar-collapse .navbar-nav .nav-item {
  display: block;
}
#sideNav .navbar-collapse .navbar-nav .nav-item .nav-link {
  display: block;
}
}
}

```

## OUTPUT:



**Design a Web page with - Navigation Menu****Aim:**

Program to design a web page with navigation menus using Angular JS.

**Procedure:**

1. Using Angular's directives to set and read the active variable.
2. When it changes, it causes the HTML that uses it to be updated automatically.
3. In Angular's terminology, this variable is called a model. It is available to all directives in the current scope, and can be accessed in your controllers (more on that in the next example).
4. JavaScript templates are with the `{{var}}` syntax, the framework sees such a string, it replaces it with the contents of the variable.
5. This operation is repeated every time var is changed.

## PROGRAM:

index.html

```

<!DOCTYPE html>
<html>

  <head>
    <meta charset="utf-8"/>
    <title>Learn AngularJS - Navigation Menu</title>

    <link href="http://fonts.googleapis.com/css?family=Open+Sans:400,700"
      rel="stylesheet" />

    <!-- The main CSS file -->
    <link href="style.css" rel="stylesheet" />

    <!--[if lt IE 9]>
    <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js">
    </script>
    <![endif]-->
  </head>

  <!-- The ng-app directive tells angular that the code below should be evaluated -->

  <body ng-app>

    <!--The navigation menu will get the value of the "active" variable as a class. The
    $event.preventDefault() stops the page from jumping when a link is clicked. -->

    <nav class="{ { active} }" ng-click="$event.preventDefault()">

      <!-- When a link in the menu is clicked, we set the active variable -->

      <a href="#" class="home" ng-click="active='home'">Home</a>
      <a href="#" class="projects" ng-click="active='projects'">Projects</a>
      <a href="#" class="services" ng-click="active='services'">Services</a>
      <a href="#" class="contact" ng-click="active='contact'">Contact</a>
    </nav>

    <!-- ng-show will show an element if the value in the quotes is truthful, while ng-hide does
    the opposite. Because the active variable is
    not set initially, this will cause the first paragraph to be visible. -->

    <p ng-hide="active">Please click a menu item</p>
    <p ng-show="active">You chose <b>{ { active} }</b></p>

    <!-- Include AngularJS from Google's CDN -->
  <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.0.7/angular.min.js">
</script>
</body>
</html>

```

**style.css**

```
/* -----  
    Simple reset  
-----*/
```

```
*{  
    margin:0;  
    padding:0;  
}
```

```
/* -----  
    General Styles  
-----*/
```

```
body{  
    font:15px/1.3 'Open Sans', sans-serif;color:  
    #5e5b64;  
    text-align:center;  
}
```

```
a, a:visited {  
    outline:none;  
    color:#389dc1;  
}
```

```
a:hover{  
    text-decoration:none;  
}
```

```
section, footer, header, aside, nav{ display:  
    block;  
}
```

```
/* -----  
    The menu  
-----*/
```

```
nav{  
    display:inline-block;  
    margin:60px auto 45px;  
    background-color:#5597b4;  
    box-shadow:0 1px 1px #ccc;  
    border-radius:2px  
}
```



```
nav a{
  display:inline-block;
  padding: 18px 30px;
  color:#fff !important;font-
  weight:bold;
  font-size:16px;
  text-decoration:none !important;line-
  height:1;
  text-transform: uppercase;
  background-color:transparent;

  -webkit-transition:background-color 0.25s;
  -moz-transition:background-color 0.25s;
  transition:background-color 0.25s;
}
```

```
nav a:first-child{
  border-radius:2px 0 0 2px;
}
```

```
nav a:last-child{
  border-radius:0 2px 2px 0;
}
```

```
nav.home .home,
nav.projects .projects,
nav.services .services,
nav.contact .contact{
  background-color:#e35885;
}
```

```
p{
  font-size:22px; font-
  weight:bold;
  color:#7d9098;
}
```

```
p b{ color:#ffffff;
  display:inline-block;
  padding:5px 10px;
  background-color:#c4d7e0;
  border-radius:2px;
  text-transform:uppercase;font-
  size:18px;
}
```

**OUTPUT:**

Please click a menu item



You chose HOME

## Inline Editor

### Aim:

Program to design a web page with inline editor using Angular JS.

### Procedure:

1. Clicking a paragraph will show a tooltip with a text field.
2. Use a controller that will initialize the models and declare two methods for toggling the visibility of the tooltip.
3. Controllers are regular JavaScript functions which are executed automatically by Angular, and which are associated with your page using the ng-controller directive.
4. When the controller function is executed, it gets the special \$scope object as a parameter.
5. Adding properties or functions to it makes them available to the view.
6. Using the ng-model binding on the text field tells Angular to update that variable when the value of the field changes (this in turn re-renders the paragraph with the value).

### PROGRAM:

#### index.html

```
<!DOCTYPE html>
<html>

  <head>
    <meta charset="utf-8"/>
    <title>Learn AngularJS - Inline Editor</title>

    <link href="http://fonts.googleapis.com/css?family=Open+Sans:400,700"
    rel="stylesheet" />

    <!-- The main CSS file -->
    <link href="style.css" rel="stylesheet" />

    <!--[if lt IE 9]>
    <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js">
    </script>
    <![endif]-->
  </head>

  <!-- Notice the controller directive -->
  <body ng-app ng-controller="InlineEditorController">

    <!-- When this element is clicked, hide the tooltip -->
    <div id="main" ng-click="hideTooltip()">

      <!-- This is the tooltip. It is shown only when the showtooltipvariable is
```

truthful -->

```
<div class="tooltip" ng-click="$event.stopPropagation()"ng-
show="showtooltip">
```

```
    <!-- ng-model binds the contents of the text field with the"value" model.
    Any changes to the text field will automatically update the value, and
    all other bindings onthe page that depend on it. -->
```

```
        <input type="text" ng-model="value" />
    </div>
```

```
    <!-- Call a method defined in the InlineEditorController thattoggles the
    showtooltip varaible -->
    <p ng-click="toggleTooltip($event)">{{ value }}</p>
```

```
</div>
```

```
    <!-- Include AngularJS from Google's CDN -->
```

```
<script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.0.7/angular.min.js">
</script>
    <script src="script.js"></script>
</body>
</html>
```

script.js

```
// The controller is a regular JavaScript function. It is called
// once when AngularJS runs into the ng-controller declaration.function
```

```
InlineEditorController($scope){
```

```
    // $scope is a special object that makes
    // its properties available to the view as
    // variables. Here we set some default values:
```

```
    $scope.showtooltip = false;
    $scope.value = 'Edit me.';
```

```
    // Some helper functions that will be
    // available in the angular declarations
```

```
    $scope.hideTooltip = function(){
```

```
        // When a model is changed, the view will be automatically
        // updated by by AngularJS. In this case it will hide the tooltip.
```

```
        $scope.showtooltip = false;
    }
```

```
    $scope.toggleTooltip = function(e){
        e.stopPropagation();
```

```
$scope.showtooltip = !$scope.showtooltip;  
}
```

```
}
```

## style.css

```
/* -----  
    Simple reset  
-----*/
```

```
*{  
    margin:0;  
    padding:0;  
}
```

```
/* -----  
    General Styles  
-----*/
```

```
body{  
    font:15px/1.3 'Open Sans', sans-serif;color:  
    #5e5b64;  
    text-align:center;  
}
```

```
a, a:visited {  
    outline:none;  
    color:#389dc1;  
}
```

```
a:hover{  
    text-decoration:none;  
}
```

```
section, footer, header, aside, nav{ display:  
    block;  
}
```

```
/* -----  
    The edit tooltip  
-----*/
```

```
.tooltip{  
    background-color:#5c9bb7;  
  
    background-image:-webkit-linear-gradient(top, #5c9bb7, #5392ad);background-  
    image:-moz-linear-gradient(top, #5c9bb7, #5392ad); background-image:linear-  
    gradient(top, #5c9bb7, #5392ad);  
  
    box-shadow: 0 1px 1px #ccc;  
    border-radius:3px;  
    width: 290px;  
    padding: 10px;
```

```

    position: absolute;
    left: 50%;
    margin-left: -150px; top:
    80px;
}

.tooltip:after{ content:"";
    position: absolute;
    border: 6px solid #5190ac;
    border-color: #5190ac transparent transparent; width: 0;
    height: 0;
    bottom: -12px;
    left: 50%;
    margin-left: -6px;
}

.tooltip input{
    border: none;
    width: 100%;
    line-height: 34px;
    border-radius: 3px;
    box-shadow: 0 2px 6px #bbb inset; text-
    align: center;
    font-size: 16px;
    font-family: inherit; color:
    #8d9395;
    font-weight: bold;
    outline: none;
}

p{
    font-size: 22px; font-
    weight: bold;
    color: #6d8088;
    height: 30px;
    cursor: default;
}

p b{ color: #ffffff;
    display: inline-block;
    padding: 5px 10px;
    background-color: #c4d7e0;
    border-radius: 2px;
    text-transform: uppercase; font-
    size: 18px;
}
p:before{
    content: '\2192';
    display: inline-block;
    margin-right: 5px; font-
    weight: normal;
    vertical-align: text-bottom;

```



}

```
#main{  
  height:300px;  
  position:relative;  
  padding-top: 150px;
```



 Edit me.



 Edit me.

```
}
```



 Internet Programming Lab

## Order Form

### Aim:

Program to design a web page with order form using Angular JS.

### Procedure:

1. Code an order form with a total price updated in real time, using another one of Angular's useful features - filters.
2. Filters let modify models and can be chained together using the pipe character |.
3. Use the currency filter, to turn a number into a properly formatted price, complete with a dollar sign and cents. You can easily make your own filters.
4. The ng-repeat binding (docs) is another useful feature of the framework. It lets loopthrough an array of items and generate markup for them. It is intelligently updated when an item is changed or deleted.

### PROGRAM:

[index.html](#)

```
<!DOCTYPE html>
<html>

  <head>
    <meta charset="utf-8"/>
    <title>Learn AngularJS - Order Form</title>

    <link href="http://fonts.googleapis.com/css?family=Cookie|Open+Sans:400,700"
    rel="stylesheet" />

    <!-- The main CSS file -->
    <link href="style.css" rel="stylesheet" />

    <!--[if lt IE 9]>
    <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js">
    </script>
    <![endif]-->
  </head>

  <!-- Declare a new AngularJS app and associate the controller -->
  <body ng-app ng-controller="OrderFormController">

    <form>

      <h1>Services</h1>

      <ul>
        <!-- Loop through the services array, assign a click handler, and set or
```

```
remove
the
"active"
css class
if needed
-->
<li ng-repeat="service
in services"ng-
```

```

        click="toggleActive(service)"
        ng-class="{ active:service.active }">
        <!-- Notice the use of the currency filter, it will format the price
        -->
        {{ service.name }} <span>{{ service.price | currency }}</span>
    </li>
</ul>

<div class="total">
    <!-- Calculate the total price of all chosen services.
    Format it as currency. -->
    Total: <span>{{ total() | currency }}</span>
</div>

</form>

<!-- Include AngularJS from Google's CDN -->
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.0.7/angular.min.js">
</script>
<script src="script.js"></script>
</body>
</html>

```

### script.js

```

function OrderFormController($scope){

    // Define the model properties. The view will loop
    // through the services array and generate a li
    // element for every one of its items.

    $scope.services = [
        {
            name: 'Web Development',
            price: 300,
            active:true
        },{
            name: 'Design',
            price: 400,
            active:false
        },{
            name: 'Integration',price:
            250, active:false
        },{ name: 'Training',
            price: 220,
            active:false
        }
    ];
}

```

```
$scope.toggleActive = function(s){s.active
    = !s.active;
};

// Helper method for calculating the total price

$scope.total = function(){ var

    total = 0;

    // Use the angular forEach helper method to
    // loop through the services array:

    angular.forEach($scope.services, function(s){if
        (s.active){
            total+= s.price;
        }
    });

    return total;
};
}
```

style.css

```
/* -----
    Simple reset
-----*/
```

```
*{
    margin:0;
    padding:0;
}
```

```
/* -----
    General Styles
-----*/
```

```
body{
    font:15px/1.3 'Open Sans', sans-serif;color:
    #5e5b64;
    text-align:center;
}
```

```
a, a:visited {
    outline:none;
    color:#389dc1;
}
```

```
a:hover{
```

text-decoration:none;

}



```
section, footer, header, aside, nav { display:
    block;
}
```

```
/* -----
    The order form
-----*/
```

```
form {
    background-color: #61a1bc;
    border-radius: 2px;
    box-shadow: 0 1px 1px #ccc;
    width: 400px;
    padding: 35px 60px;
    margin: 80px auto;
}
```

```
form h1 {
    color: #fff; font-
    size: 64px;
    font-family: 'Cookie', cursive; font-
    weight: normal;
    line-height: 1;
    text-shadow: 0 3px 0 rgba(0,0,0,0.1);
}
```

```
form ul {
    list-style: none;
    color: #fff; font-
    size: 20px;
    font-weight: bold; text-
    align: left; margin: 20px
    0 15px;
}
```

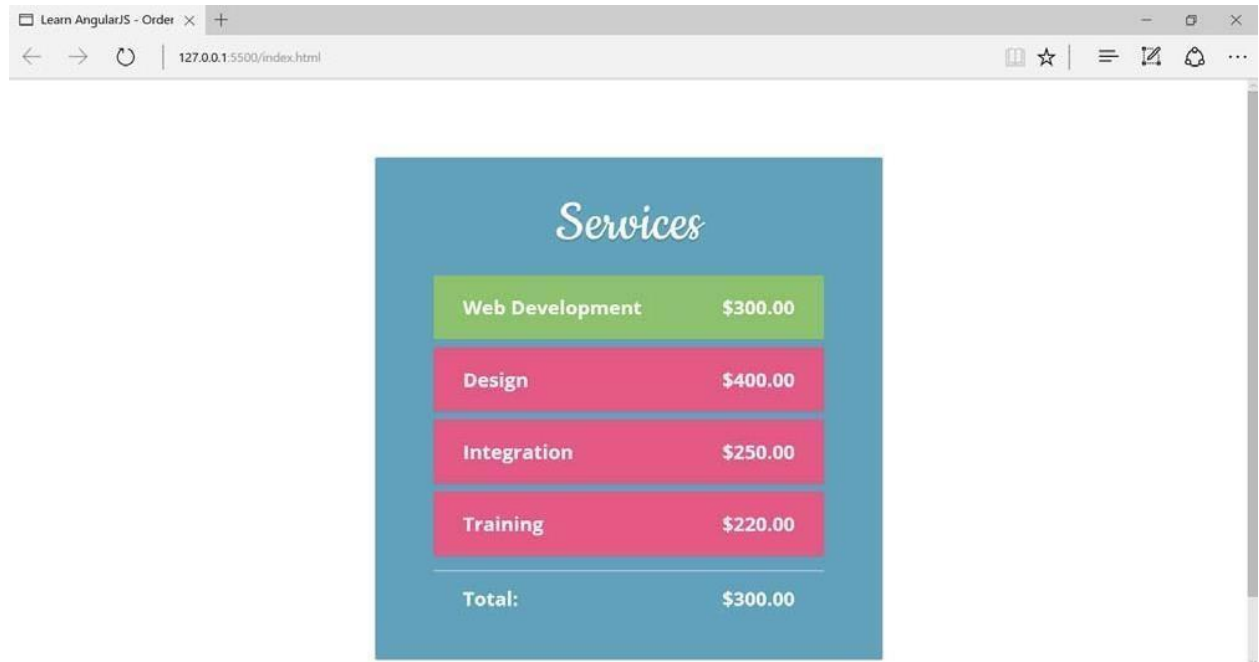
```
form ul li {
    padding: 20px 30px;
    background-color: #e35885;
    margin-bottom: 8px;
    box-shadow: 0 1px 1px rgba(0,0,0,0.1);
    cursor: pointer;
}
```

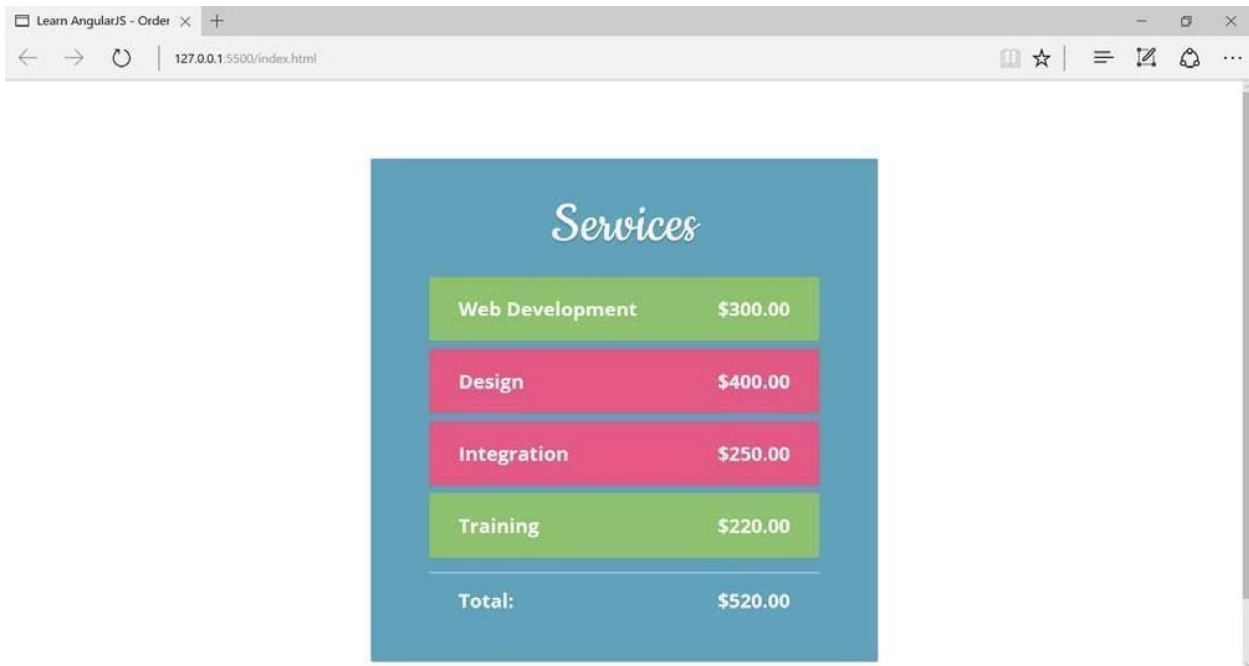
```
form ul li span {
    float: right;
}
```

```
form ul li.active {
    background-color: #8ec16d;
}
```

```
div.total{  
  border-top:1px solid rgba(255,255,255,0.5);
```

```
padding:15px 30px;  
font-size:20px; font-  
weight:bold;text-  
align: left;color:#fff;  
}  
  
div.total span{  
    float:right;  
}
```

**OUTPUT:**



The screenshot shows a web browser window with the title 'Learn AngularJS - Order' and the address bar displaying '127.0.0.1:5500/index.html'. The main content is a blue box titled 'Services' containing a table with four rows of services and their prices, followed by a total row.

Services	
Web Development	\$300.00
Design	\$400.00
Integration	\$250.00
Training	\$220.00
<hr/>	
Total:	\$520.00

## Instant Search

**Aim:**

Program to design a web page with instant search using Angular JS.

**Procedure:**

1. To filter a list of items by typing into a text field.
2. First have to turn the application into a module.
3. Modules are a way of organizing JavaScript applications into self-contained components that can be combined in new and interesting ways.
4. Angular relies on this technique for code isolation and requires that your application follows it before you can create a filter.
5. There are only two things that you need to do to turn your app into a module:
  1. Use the `angular.module("name",[])` function call in your JS. This will instantiate and return a new module;
  2. Pass the name of the module as the value of the `ng-app` directive.
6. Creating a filter then is as simple as calling the `filter()` method on the module object returned by `angular.module("name", [])`.
7. Filters follow the Angular.js philosophy - every piece of code that you write should be self-contained, testable and reusable.
8. Use this filter in all your views and even combine it with others through chaining.

**PROGRAM:**

index.html

```

<!DOCTYPE html>
<html>

  <head>
    <meta charset="utf-8"/>
    <title>Learn AngularJS - Instant Search</title>

    <link href="http://fonts.googleapis.com/css?family=Cookie|Open+Sans:400,700"
    rel="stylesheet" />

    <!-- The main CSS file -->
    <link href="style.css" rel="stylesheet" />

    <!--[if lt IE 9]>
    <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js">
    </script>
    <![endif]-->
  </head>

  <!-- Initialize a new AngularJS app and associate it with a module named "instantSearch" -->
  <body ng-app="instantSearch" ng-controller="InstantSearchController">

    <div class="bar">
      <!-- Create a binding between the searchString model and the text field -->
      <input type="text" ng-model="searchString"
      placeholder="Enter your search terms" />
    </div>

    <ul>
      <!-- Render a li element for every entry in the items array. Notice the custom search
      filter "searchFor". It takes the value of the searchString model as an
      argument. -->
      <li ng-repeat="i in items | searchFor:searchString">
        <a href="{ {i.url} }"></a>
        <p>{ {i.title} }</p>
      </li>
    </ul>

    <!-- Include AngularJS from Google's CDN -->
    <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.0.7/
    angular.min.js"></script>
    <script src="script.js"></script>
  </body>
</html>

```

**script.js**

```
// Define a new module for our app
```

```
var app = angular.module("instantSearch", []);
```

// Create the instant search filter

```
app.filter('searchFor', function(){

    // All filters must return a function. The first parameter
    // is the data that is to be filtered, and the second is an
    // argument that may be passed with a colon (searchFor:searchString)return

    function(arr, searchString){

        if(!searchString){
            return arr;
        }

        var result = [];

        searchString = searchString.toLowerCase();

        // Using the forEach helper method to loop through the array
        angular.forEach(arr, function(item){

            if(item.title.toLowerCase().indexOf(searchString) !== -1){
                result.push(item);
            }

        });

        return result;
    };
});
```

// The controller

```
function InstantSearchController($scope){

    // The data model. These items would normally be requested via AJAX,
    // but are hardcoded here for simplicity. See the next example for
    // tips on using AJAX.

    $scope.items = [
        {
            url: 'http://tutorialzine.com/2013/07/50-must-have-plugins-for-extending-
twitter-bootstrap/',
            title: '50 Must-have plugins for extending Twitter Bootstrap',image:
            'http://cdn.tutorialzine.com/wp-
content/uploads/2013/07/featured_4-100x100.jpg'
        },
    ],
```



{

url: 'http://tutorialzine.com/2013/08/simple-registration-system-

```

php-mysql/', title: 'Making a Super Simple Registration System With PHP and MySQL
L', image: 'http://cdn.tutorialzine.com/wp-

content/uploads/2013/08/simple_registration_system-100x100.jpg'
    },
    {
        url: 'http://tutorialzine.com/2013/08/slideout-footer-css/', title: 'Create a slide-out
        footer with this neat z-index trick',image: 'http://cdn.tutorialzine.com/wp-
content/uploads/2013/08/slide-out-footer-100x100.jpg'
    },
    {
        url: 'http://tutorialzine.com/2013/06/digital-clock/', title: 'How to Make a
        Digital Clock with jQuery and CSS3',image:
        'http://cdn.tutorialzine.com/wp-
content/uploads/2013/06/digital_clock-100x100.jpg'
    },
    {
        url: 'http://tutorialzine.com/2013/05/diagonal-fade-gallery/',title: 'Smooth
        Diagonal Fade Gallery with CSS3 Transitions', image:
        'http://cdn.tutorialzine.com/wp-
content/uploads/2013/05/featured-100x100.jpg'
    },
    {
        url: 'http://tutorialzine.com/2013/05/mini-ajax-file-upload-form/',title: 'Mini AJAX
        File Upload Form',
        image: 'http://cdn.tutorialzine.com/wp-
content/uploads/2013/05/ajax-file-upload-form-100x100.jpg'
    },
    {
        url: 'http://tutorialzine.com/2013/04/services-chooser-backbone-
js/',
        title: 'Your First Backbone.js App – Service Chooser',image:
        'http://cdn.tutorialzine.com/wp-

```

```
content/uploads/2013/04/service_chooser_form-100x100.jpg'
    }
};
```

```
}
```

### **style.css**

```
/* -----
   Simple reset
-----*/
```

```
*{
    margin:0;
    padding:0;
}
```

```
/* -----
   General Styles
-----*/
```

```
body{
    font:15px/1.3 'Open Sans', sans-serif;color:
    #5e5b64;
    text-align:center;
}
```

```
a, a:visited {
    outline:none;
    color:#389dc1;
}
```

```
a:hover{
    text-decoration:none;
}
```

```
section, footer, header, aside, nav{ display:
    block;
}
```

```
/* -----
   The search input
-----*/
```

```
.bar{
    background-color:#5c9bb7;

    background-image:-webkit-linear-gradient(top, #5c9bb7, #5392ad);background-
    image:-moz-linear-gradient(top, #5c9bb7, #5392ad); background-image:linear-
    gradient(top, #5c9bb7, #5392ad);
```

b  
o  
x  
-  
s  
h  
a  
d  
o  
w  
:

0

1  
p  
x

1  
p  
x

#  
c  
c  
c  
;

b  
o  
r  
d  
e  
r  
-  
r  
a  
d  
i  
u  
s  
:

2  
p  
x  
;

```

width: 400px;
padding: 14px;
margin: 80px auto 20px;
position: relative;
}

.bar input{
  background: #fff no-repeat 13px 13px;

  background-
image: url(data:image/png;base64,iVBORw0KGgoAAAANSUhEUgAAABAAAAAQCAYAAAAf8/9
hAAA
AGXRFWHRTb2Z0d2FyZQBBZG9iZSBBbWFnZVJlYWR5ccllPAAAAyBpVFh0WE1MOmNvbS5h
ZG9iZS54bX
AAAAAAAAADw/eHBhY2tldCBiZWdpbj0i77u/IiBpZD0iVzVNME1wQ2VoaUh6cmVTek5UY3pr
YzlkIj8+I
Dx4OnhtcG1ldGEgeG1sbnM6eD0iYWRvYmU6bnM6bWV0YS8iIHg6eG1wdGs9IkFkb2JlIFhNU
CBDb3Jl
IDUuMC1jMDYwIDYxLjEzNDc3NywgMjAxMC8wMi8xMi0xNzozMjowMCAgICAgICAgIj4gP
HJkZjpSREY
geG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMj
Ij4gPH
JkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9IiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRvYm
mUuY29tL
3hhcC8xLjAvLiB4bWxuczp4bXBNTT0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wL21tLy
IgeG1s
bnM6eG1wPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbnMj
Ij4gPH
tcDpDcmVhdG9yVG9vbD0iQWRvYmU6UGhvdG9zaG9wIENtNSBxZW5kb3dzLiB4bXBNTTpJ
bnN0YXV5ZjZU
IEPSJ4bXAuaWlkOkU5NEY0RTIFMTA4NzExRTM5RTEzQkFBQzMyRjkyQzVBliB4bXBNTT
pEb2N1bWVud
EIEPSJ4bXAuZGlkOkU5NEY0RTIGMTA4NzExRTM5RTEzQkFBQzMyRjkyQzVBliB4bXBNTT
NOKRlcm12
ZWRGcm9tIHNOUmVmOmluc3RhbmNlSUQ9InhtcC5paWQ6RTk0RjRFOUMxMDg3MTFFMzI
FMTNCQUFDMzJ
GOTJDNUeIiHN0UmVmOmRvY3VtZW50SUQ9InhtcC5kaWQ6RTk0RjRFOUQxMDg3MTFF
MzIIFMTNCQUFDMz
JGOTJDNUeILz4gPC9yZGY6RGVzY3JpcHRpb24+IDwvcmlpZD0iVzVNME1wQ2VoaUh6cmVTek5UY3pr
YzlkIj8+I
Dw/eHBhY2tldCBiZWdpbj0i77u/IiBpZD0iVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkIj8+I
2tldCBiZWdpbj0i77u/IiBpZD0iVzVNME1wQ2VoaUh6cmVTek5UY3prYzlkIj8+I
iFYtM6uofYaiEW2SRJtEi9YxIk1p07ZkWsWu0v/wnByve7vm5ee8M+85zz1jbt9Os+WiGkYdYxjC
Ox5
wgFeXUHmtBSzpcCGa+5BJTCjEP+0nKWAT8xqe4ArPGEEVC1hHEbs2oBwdXkm7mj/JLZrad4
37sCGHOf
UtcziutuYu2v8XUFF/4f6vMK/YgAH1HxkBYV60AR31gxkBYd6xAeF3VzMCwvzOBpypX8V4y
uFRzX2d2
gD/l5yjH4fYQEnzkj4fae5rJulF2sMXVrAsaTWttRFu4Osb+1jEDT71/ZveyhouTch2fINQL9hKefKj
uYFfuznXWzXMTabyrvfyIV3M4vhXgAEAUMs7K0J9UJAAAAAASUVORK5CYII=);
border: none;

```

width: 100%;  
line-height: 19px;

padding: 11px 0;

border-radius: 2px;  
box-shadow: 0 2px 8px #c4c4c4 inset;text-align: left;  
font-size: 14px;  
font-family: inherit;color:  
#738289;  
font-weight: bold;  
outline: none; text-indent: 40px;

}

ul{

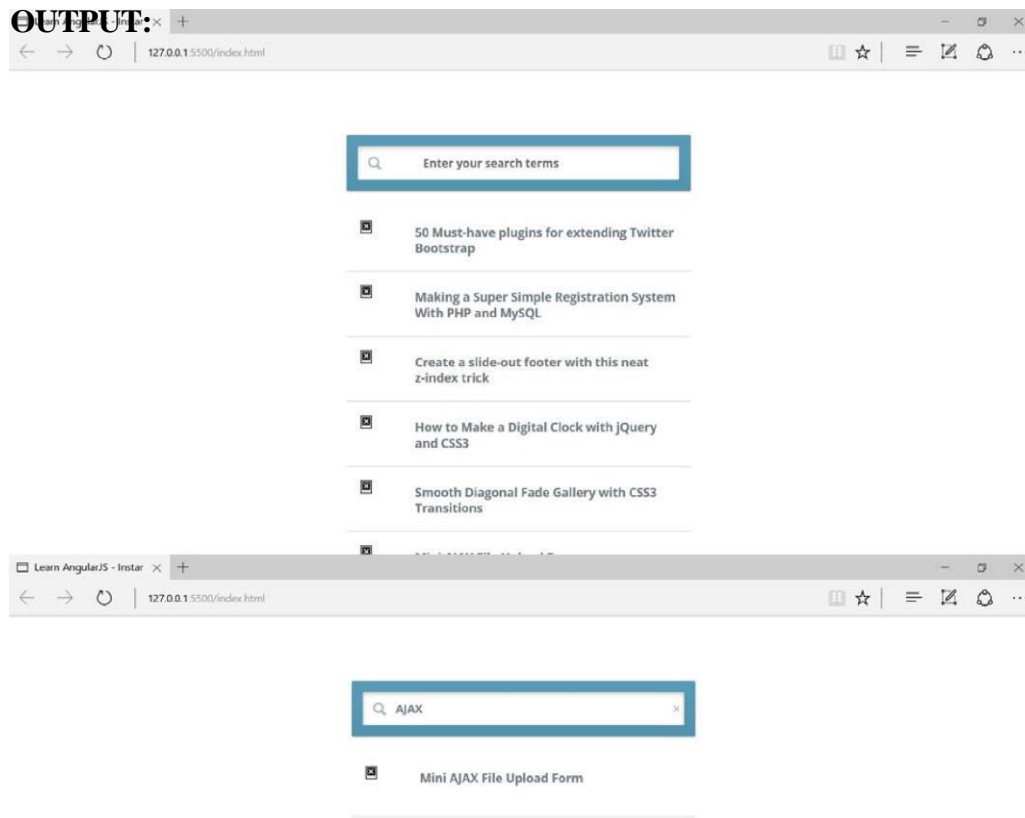
list-style: none;  
width: 428px;  
margin: 0 auto; text-align: left

}

```
ul li{
  border-bottom: 1px solid #ddd;
  padding: 10px;
  overflow: hidden;
}
```

```
ul li img{
  width:60px;
  height:60px;
  float:left;
  border:none;
}
```

```
ul li p{
  margin-left: 75px;
  font-weight: bold;
  padding-top: 12px;
  color:#6e7a7f;
}
```

**OUTPUT:**



## Switchable Grid

**Aim:**

Program to design a web page with Switchable grid using Angular JS.

**Procedure:**

1. Write a service that communicates with Instagram's API and returns an array with the most popular photos at the moment.
2. Include one additional Angular.js file in the page:

```
<script src="http://ajax.googleapis.com/ajax/libs/angularjs/1.0.7/angular-resource.min.js">
</script>
```

3. This includes the ngResource module for easily working with AJAX APIs (the module is exposed as the \$resource variable in the code).
4. This file is automatically included in the editor.

## PROGRAM:

```

index.html
<!DOCTYPE html>
<html>

  <head>
    <meta charset="utf-8"/>
    <title>Learn AngularJS - Switchable Grid</title>

    <link href="http://fonts.googleapis.com/css?family=Cookie|Open+Sans:400,700"
    rel="stylesheet" />

    <!-- The main CSS file -->
    <link href="style.css" rel="stylesheet" />

    <!--[if lt IE 9]>
    <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js">
    </script>
    <![endif]-->
  </head>

  <body ng-app="switchableGrid" ng-controller="SwitchableGridController">

    <div class="bar">

      <!-- These two buttons switch the layout variable, which causes
      the correct UL to be shown. -->

      <a href="#" class="list-icon" ng-class =
      "{active: layout == 'list'}" ng-click="layout = 'list'"></a>
      <a href="#" class="grid-icon" ng-class =
      "{active: layout == 'grid'}" ng-click="layout = 'grid'"></a>
    </div>

    <!-- We have two layouts. We choose which one to show depending on the
    "layout" binding -->

    <ul ng-show="layout == 'grid'" class="grid">
      <!-- A view with big photos and no text -->
      <li ng-repeat="p in pics">
        <a href="{{p.link}}" target="_blank">
          </a>
        </li>
      </ul>

    <ul ng-show="layout == 'list'" class="list">
      <!-- A compact view smaller photos and titles -->
      <li ng-repeat="p in pics">
        <a href="{{p.link}}" target="_blank">
          </a>
        <p>{{p.caption.text}}</p>
      </li>
    </ul>
  </body>
</html>

```

</ul>

```

        <!-- Include AngularJS from Google's CDN and the resource module -->
        <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.0.7/angular.min.js"></script>
        <script src="http://ajax.googleapis.com/ajax/libs/angularjs/1.0.7/angular-
        resource.min.js"></script>
        <script src="script.js"></script>
    </body>
</html>

```

script.js

```

// Define a new module. This time we declare a dependency on
// the ngResource module, so we can work with the Instagram APIvar app =

angular.module("switchableGrid", ['ngResource']);

// Create and register the new "instagram" service
app.factory('instagram', function($resource){

    return {
        fetchPopular: function(callback){

// The ngResource module gives us the $resource service. It makes working with
// AJAX easy. Here I am using a client_id of a test app. Replace it with yours.

var api = $resource('https://api.instagram.com/v1/media/popular?client_id=:client_id&callback=JSON_CALLBACK',{
    client_id: '642176ece1e7445e99244cec26f4de1f'
}},{
// This creates an action which we've chosen to name "fetch". It issues
// an JSONP request to the URL of the resource. JSONP requires that the
// callback=JSON_CALLBACK part is added to the URL.
    fetch: {method: 'JSONP'}
});

api.fetch(function(response){

// Call the supplied callback function
callback(response.data);
});
});

```

// The controller. Notice that I've included our instagram service which we  
 // defined below. It will be available inside the function automatically.function

```
SwitchableGridController($scope, instagram){

    // Default layout of the app. Clicking the buttons in the toolbar
    // changes this value.

    $scope.layout = 'grid';

    $scope.pics = [];

    // Use the instagram service and fetch a list of the popular pics
    instagram.fetchPopular(function(data){

        // Assigning the pics array will cause the view
        // to be automatically redrawn by Angular.
        $scope.pics = data;
    });

}
```

### style.css

```
-----
/*----- Simple reset
*/
```

```
*{
    margin:0;
    padding:0;
    ;
}
```

```
-----
/*----- General Styles
*/
```

```
body{
    font:15px/1.3 'Open Sans', sans-serif;color:
    #5e5b64;
    text-align:center;
}
```

```
a, a:visited {
    outline:none;
    color:#389dc1;
}
```

```
a:hover{
    text-decoration:none;
}
```

```
section, footer, header, aside, nav{display:  
    block;  
}
```

-----/\*----- The search input  
-----\*/

```
.bar{
  background-color:#5c9bb7;

  background-image:-webkit-linear-gradient(top, #5c9bb7, #5392ad);
  background-image:-moz-linear-gradient(top, #5c9bb7, #5392ad);
  background-image:linear-gradient(top, #5c9bb7, #5392ad);

  box-shadow: 0 1px 1px #ccc;
  border-radius: 2px;
  width: 580px;
  padding: 10px;
  margin: 80px auto 25px;
  position:relative;
  text-align:right;
  line-height: 1;
}

.bar a{
  background:#4987a1 center center no-repeat;
  width:32px;
  height:32px;
  display:inline-block;
  text-decoration:none !important;
  margin-right:5px;
  border-radius:2px;
}
.bar a.active{
  background-color:#c14694;
}

.bar a.list-icon{
  background-
image:url(data:image/png;base64,iVBORw0KGgoAAAANSUgAAABAAAAAQCAAAAAAf
8/9hAAA
AGXRFWHRTb2Z0d2FyZQBBZG9iZSBJbWFnZVJlYWR5ccllPAAAAyBpVFh0WE1MOmNvb
S5hZG9iZS54bX
AAAAAADw/eHBhY2tldCBiZWdpbj0i77u/LiBpZD0iVzVNME1wQ2VoaUh6cmVTek5UY3
prYzklJ8+I
Dx4OnhtcG1ldGEgeG1sbnM6eD0iYWVRvYmU6bnM6bWV0YS8iIHg6eG1wdGs9IkFkb2JlIFh
NUCBDb3Jl
IDUuMC1jMDYwIDYxLjEzNDc3NywgMjAxMC8wMi8xMi0xNzozMjowMCAgICAgICAgIj4
gPHJkZjpSREY
geG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbn
MjIj4gPH
JkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9IiIgeG1sbnM6eG1wPSJodHRwOi8vbnMuYWRv
YmUuY29tL
3hhcC8xLjAvLiB4bWxuczp4bXBNTT0iaHR0cDovL25zLmFkb2JlLnNvbS94YXAvMS4wL21t
LyIgeG1s
bnM6c3RSZWY9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC9zVHlwZS9SZXNvdXJkZ
```

VJIZiMiIHh

tcDpDcmVhdG9yVG9vbD0iQWRvYmUgUGhvdG9zaG9wIENTNSBXaW5kb3dzliB4bXBNT  
TpJbnN0YW5jZU



IEPSJ4bXAuaWlkOkYzNkFCQ0ZBMTBCRTExRTM5NDk4RDFEM0E5RkQ1NEZCIiB4bXB  
 NTTpEb2N1bWVud  
 ELEPSJ4bXAuZGlkOkYzNkFCQ0ZCMTBCRTExRTM5NDk4RDFEM0E5RkQ1NEZCIj4gPH  
 htcE1NokRlcm12  
 ZWRGcm9tIHN0UmVmOmluc3RhbmNlSUQ9InhtcC5paWQ6RjM2QUJDRjgxeMEJFMtFFMzk0  
 OThEMUQzQTl  
 GRDU0RkIiIHN0UmVmOmRvY3VtZW50SUQ9InhtcC5kaWQ6RjM2QUJDRjkxeMEJFMtFFMz  
 k0OThEMUQzQT  
 IGRDU0RkIiLz4gPC9yZGY6RGVzY3JpcHRpb24+IDwvcmlRmOlJERj4gPC94OnhtcG1ldGE+ID  
 w/eHBhY  
 2tldCB1bmQ9InIiPz7h1bLqAAAAWU1EQVR42mL8////BwYGBn4GCACxBRlIAIxAA/4jaXoPEk  
 MyjJ+A  
 /g9MDJQBRhYg8RFqMwg8RJIUINYLFDMBUi+ADQAF1n8ofk9yIAy6WPg4GgtDMRYAAgw  
 AdLYwLAoIwPgAAAAASUVORK5CYII=);  
 }

.bar a.grid-icon{  
 background-  
 image:url(data:image/png;base64,iVBORw0KGgoAAAANSU1hEUgAAABAAAAAQCAYAAAAf  
 8/9hAAA  
 AGXRFWHRTb2Z0d2FyZQBBZG9iZSBJbWFnZVJlYWR5ccllPAAAAyBpVFh0WE1MOmNvb  
 S5hZG9iZS54bX  
 AAAAAAADw/eHBhY2tldCBiZWdpbj0i77u/LiBpZD0iVzVNME1wQ2VoaUh6cmVTek5UY3  
 prYzklj8+I  
 Dx4OnhtcG1ldGEgeG1sbnM6eD0iYWVwYmU6bnM6bWV0YS8iIHg6eG1wdGs9IkFkb2JlIFh  
 NUCBDb3Jl  
 IDUuMC1jMDYwIDYxLjEzNDc3NywgMjAxMC8wMi8xMi0xNzozMjowMCAgICAgICAgIj4g  
 PHJkZjpSREY  
 geG1sbnM6cmRmPSJodHRwOi8vd3d3LnczLm9yZy8xOTk5LzAyLzIyLXJkZi1zeW50YXgtbn  
 MjIj4gPH  
 JkZjpEZXNjcmlwdGlvbiByZGY6YWJvdXQ9IiIgeG1sbnM6eG1wPSJodHRwOi8vb3MuYWRv  
 YmUuY29tL  
 3hhcC8xLjAvLiB4bWxuczp4bXBNTT0iaHR0cDovL25zLmFkb2JlLmNvbS94YXAvMS4wL21t  
 LyIgeG1s  
 bnM6c3RSZWY9Imh0dHA6Ly9ucy5hZG9iZS5jb20veGFwLzEuMC9zVHlwZS9SZXNvdXJzZ  
 VJlZiMiIHh  
 tcDpDcmVhdG9yVG9vbD0iQWRvYmUgUGhvdG9zaG9wIENTNSBxAW5kb3dzLiB4bXBNT  
 TpJbnN0YW5jZU  
 IEPSJ4bXAuaWlkOkJBEQkMyQzE0MTBCRjExRTNBMDIGRTYyOTIBNDdCN0I4IiB4bXBNT  
 TTpEb2N1bWVud  
 ELEPSJ4bXAuZGlkOkJBEQkMyQzE1MTBCRjExRTNBMDIGRTYyOTIBNDdCN0I4Ij4gPHhtc  
 E1NokRlcm12  
 ZWRGcm9tIHN0UmVmOmluc3RhbmNlSUQ9InhtcC5paWQ6MERCQzJDMTlxMEJGMtFF  
 M0EwOUZFNjI5OU  
 0N0I3QjgiIHN0UmVmOmRvY3VtZW50SUQ9InhtcC5kaWQ6MERCQzJDMTMxMEJGMtFF  
 FM0EwOUZFNjI5OU  
 E0N0I3QjgiLz4gPC9yZGY6RGVzY3JpcHRpb24+IDwvcmlRmOlJERj4gPC94OnhtcG1ldGE+I  
 Dw/eHBhY  
 2tldCB1bmQ9InIiPz4MjPshAAAAXklEQVR42mL4////h/8I8B6IGaCYKHFGEMnAwCDIAAHv  
 gZgRyiZK  
 nImBQsACxB+hNoDAQyQ5osQZIT4gH1DsBZABH6AB8x/JaQzEig++WPiI7Rxio/GwmCIB

```
YAAAwAwVlzMp1R0aQAAAABJRU5ErkJggg==);  
}
```

```
.bar input{
    background:#fff no-repeat 13px 13px;

    border: none;
    width: 100%;
    line-height: 19px;
    padding: 11px 0;

    border-radius: 2px;
    box-shadow: 0 2px 8px #c4c4c4 inset;
    text-align: left;
    font-size: 14px;
    font-family: inherit;
    color: #738289;
    font-weight: bold;
    outline: none; text-
    indent: 40px;
}
```

```
---/*----- List layout
----- */
```

```
ul.list{
    list-style: none;
    width: 500px;
    margin: 0 auto;
    text-align: left;
}

ul.list li{
    border-bottom: 1px solid #ddd;
    padding: 10px;
    overflow: hidden;
}

ul.list li img{
    width:120px;
    height:120px
    ;float:left;
    border:none;
}

ul.list li p{
    margin-left: 135px;
    font-weight: bold;
    color:#6e7a7f;
}
```

```
---/*----- Grid layout
----- */
```

```
ul.grid{  
  list-style: none;  
  width: 570px;
```

```
        margin: 0 auto;
        text-align: left;
    }

    ul.grid li{
        padding: 2px;
        float:left;
    }

    ul.grid li img{
        width:280px;
        height:280px;
        display:block;
        border:none;
    }
```

## OUTPUT:



## Single Page Application

### Aim:

Program to develop an attractive web pages using Bootstrap.

### Procedure:

1. Define a simple controller:
2. After created module and controller, use them in our HTML.
3. Include angular script and app.js that we built.
4. Specify module in ng-app attribute and controller in ng-controller attribute.
5. Start working on adding single page application support.
6. Make a single page application and don't want any page refreshes, use Angular's routing capabilities.
7. Include angular-route script after the main angular script.
8. Specify that the module depends on ngRoute module to be able to use it.
9. The next thing is to distinguish common HTML for every page. This HTML will be layout of the website.
10. Then specify the place where HTML of each page will be placed in our layout. There is a ng-view directive for that.
11. ng-view is an Angular directive that will include the template of the current route (for example, /blog or /about) in the main layout file.
12. Configure the routes. Use \$routeProvider service from the ngRoute module.
13. For each route, specify templateUrl and controller.
14. If user will try to go to the route that does not exist, handle this by using otherwise function. In our case, we will redirect user to the "/" route:
15. Build controllers for every route (already specified their names in routeProvider).

**PROGRAM:****index.html**

```

<!doctype html>
<html ng-app="myApp">
  <head>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/angular.js/1.4.7/
      angular.min.js"></script>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/angular.js/1.4.7/angular-
      route.min.js"></script>
  </head>
  <body>
    <script type="text/ng-template" id="pages/home.html">
      <h1>Home</h1>
      <h3>{{ message }}</h3>
    </script>
    <script type="text/ng-template" id="pages/courses.html">
      <h1>Courses</h1>
      <h3>{{ message }}</h3>
    </script>
    <script type="text/ng-template" id="pages/contactus.html">
      <h1>Contact Us</h1>
      <h3>{{ message }}</h3>
    </script>

    <a href="#/">Home</a>
    <a href="#/courses">Courses</a>
    <a href="#/contactus">Contact Us</a>

    <div ng-view></div>

    <script src="app.js"></script>
  </body>
</html>

```

**app.js**

```

var app = angular.module('myApp', ['ngRoute']);

app.config(function($routeProvider) {
  $routeProvider

    .when('/', {
      templateUrl : 'pages/home.html',
      controller : 'HomeController'
    })

    .when('/courses', {
      templateUrl : 'pages/courses.html',
      controller : 'CoursesController'
    })
})

```

```
.when('/contactus', {  
  templateUrl : 'pages/contactus.html',  
  controller : 'ContactUsController'  
})
```



```
.otherwise({redirectTo: '/'});  
});  
  
app.controller('HomeController', function($scope) {  
    $scope.message = 'Welcome to REC';  
});  
  
app.controller('CoursesController', function($scope) {  
    $scope.message = 'AERO, AUTO, BIOMED, BIOTECH, CHEMICAL, CIVIL, CSE,  
        CSBC,ECE, EEE, FT, IT, MCT, MECH';  
});  
  
app.controller('ContactUsController', function($scope) {  
    $scope.message = 'Rajalakshmi Nagar, Thandalam, Chennai - 602 105';  
});
```

**OUTPUT:**



[Home](#) [Courses](#) [Contact Us](#)

# Home

Welcome to REC



[Home](#) [Courses](#) [Contact Us](#)

# Courses

AERO, AUTO, BIOMED, BIOTECH, CHEMICAL, CIVIL, CSE, CSBC, ECE, EEE, FT, IT, MCT, MECH



## Contact Us

Rajalakshmi Nagar, Thandalam, Chennai - 602 105

---

