BANGALORE INSTITUTE OF TECHNOLOGY

Affiliated to Visvesvaraya Technological University- Belagavi

K.R. ROAD, V. V. PURA, BENGALURU-560 004

Department of Computer Science & Engineering

Angular JS Laboratory Manual

21CSL581

V-Semester

All Programs developed by Dr. Harish Kumar B T,
Associate Professor, Dept.of CSE, BIT,Bengaluru

ANGULAR JS			
Course Code	**21CSL581**	CIE Marks	50
Teaching Hours/Week (L:T:P: S)	0:0:2:0	SEE Marks	50
Credits	01	Total marks	100
Examination type (SEE)	PRACTICAL		

Course objectives:

- To learn the basics of Angular JS framework.
- To understand the Angular JS Modules, Forms, inputs, expression, data bindings and Filters
- To gain experience of modern tool usage (VS Code, Atom or any other] in developing Web applications

Sl.NO	Experiments
1	Develop Angular JS program that allows user to input their first name and last name and display their full name. **Note**: The default values for first name and last name may be included in the program.
2	Develop an Angular JS application that displays a list of shopping items. Allow users to add and remove items from the list using directives and controllers. **Note**: The default values of items may be included in the program.
3	Develop a simple Angular JS calculator application that can perform basic mathematical operations (addition, subtraction, multiplication, division) based on user input.
4	Write an Angular JS application that can calculate factorial and compute square based on given user input.
5	Develop AngularJS application that displays a details of students and their CGPA. Allow users to read the number of students and display the count. **Note**: Student details may be included in the program.
6	Develop an AngularJS program to create a simple to-do list application. Allow users to add, edit, and delete tasks. **Note**: The default values for tasks may be included in the program.
7	Write an AngularJS program to create a simple CRUD application (Create, Read, Update, and Delete) for managing users.
8	Develop AngularJS program to create a login form, with validation for the username and password fields.
9	Create an AngularJS application that displays a list of employees and their salaries. Allow users to search for employees by name and salary. **Note**: Employee details may be included in the program.
10	Create AngularJS application that allows users to maintain a collection of items. The application should display the current total number of items, and this count should automatically update as items are added or removed. Users should be able to add items to the collection and remove them as needed. **Note**: The default values for items may be included in the program.
11	Create AngularJS application to convert student details to Uppercase using angular filters. **Note**: The default details of students may be included in the program.
12	Create an AngularJS application that displays the date by using date filter parameters

NOTE 1: Sample Programs are given at the end for the students to practice

Note 2: Since Internet is not allowed during the exams it is not possible to use the angular.min.js from online. Hence, instead of using the online script, please download the offline angular.min.js from the link below

https://drive.google.com/file/d/18WE3NQA7p2isaLzSnMDJYXLWfWiW3NvT/view?usp=drive_link

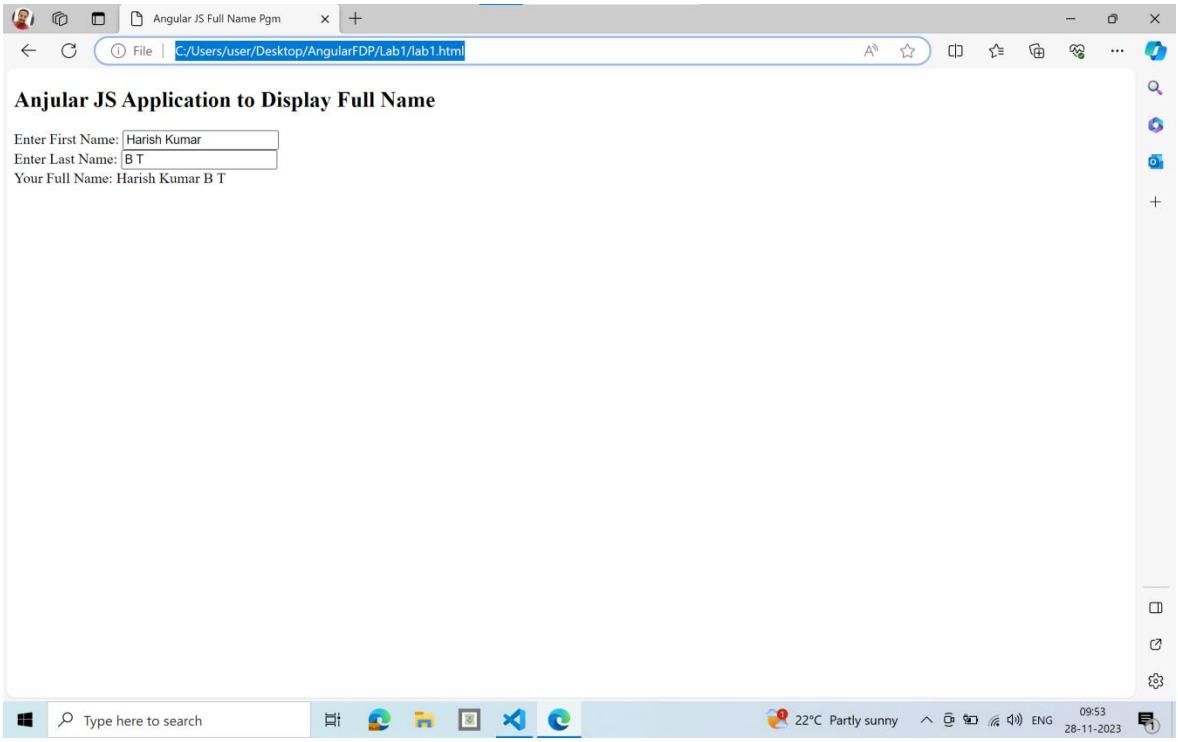
and paste it inside the same directory from where the program is being run and use the below script to include the angular.min.js.

<script type="text/javascript" src="angular.min.js"></script>

1. Develop Angular JS program that allows user to input their first name and last name and display their full name. **Note**: The default values for first name and last name may be included in the program.

```
<!DOCTYPE html>
<html>
<title>
   Angular JS Full Name Pgm
</title>
<head>
   <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
</script>
<script>
   var app=angular.module("myApp",[]);
   app.controller("myCntrl",function($scope){
      $scope.firstName="Harish Kumar"
      $scope.lastName="B T"
   });
</script>
</head>
<body ng-app="myApp">
   <h2>Anjular JS Application to Display Full Name</h2>
   <div ng-controller="myCntrl">
      Enter First Name: <input type="text" ng-model="firstName"><br/>
      Enter Last Name: <input type="text" ng-model="lastName"><br/>
      Your Full Name: {{firstName +" "+ lastName}}
   </div>
</body>
</html>
```

Output:

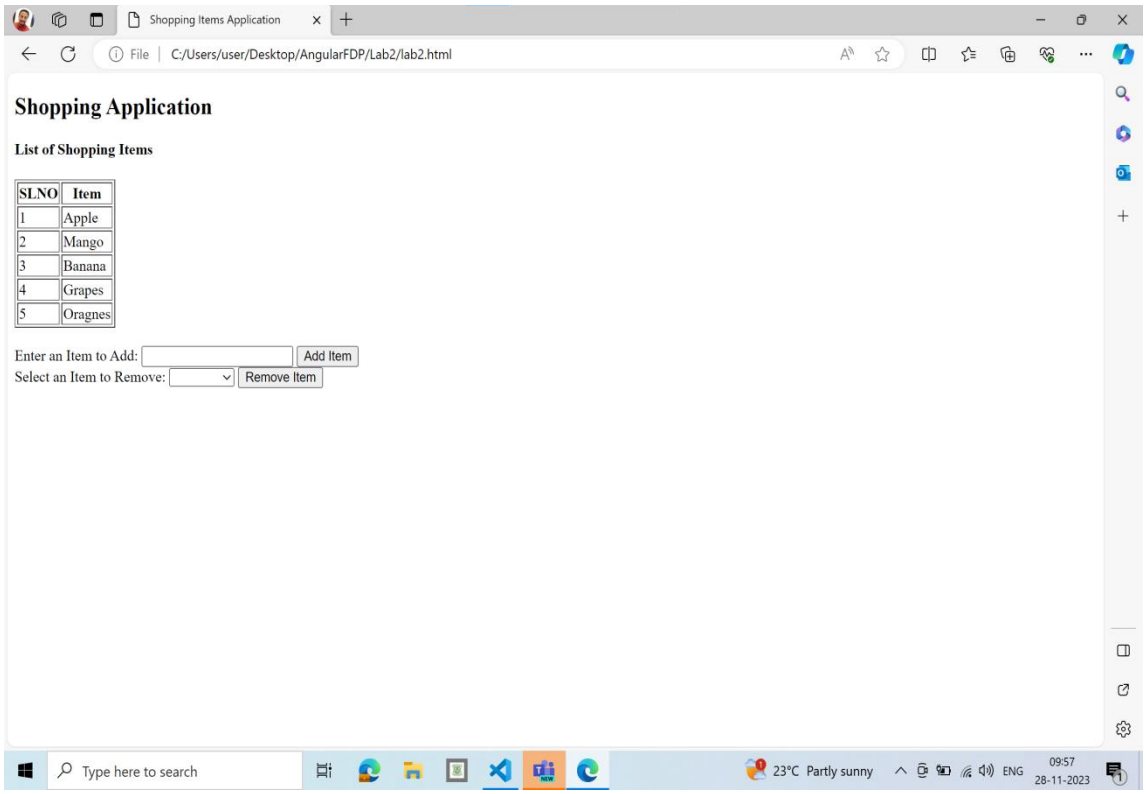

Angular JS Full Name Pgm
File | C:/Users/user/Desktop/AngularFDP/Lab1/lab1.html
Anjular JS Application to Display Full Name
Enter First Name: Harish Kumar
Enter Last Name: B T
Your Full Name: Harish Kumar B T
Type here to search
22°C Partly sunny
ENG
09:53
28-11-2023

2. Develop an Angular JS application that displays a list of shopping items. Allow users to add and remove items from the list using directives and controllers. Note: The default values of items may be included in the program.

```
<!DOCTYPE html>
<html>
<title>
   Shopping Items Application
</title>
<head>
   <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
</script>
<script>
   var app=angular.module("myApp",[]);
   app.controller("myCntrl",function($scope){
   $scope.shoppingItems=['Apple','Mango','Banana','Grapes']
   $scope.addItem=function(){
  if($scope.newItem && $scope.shoppingItems.indexOf($scope.newItem)==-1)
         {
            $scope.shoppingItems.push($scope.newItem)
            $scope.newItem=""
         }
         else
         {
            if($scope.newItem)
            alert("This item is already there in the shopping list")
           else
           alert("Please enter an item to add")
         }
      }

      $scope.removeItem=function(){
         //console.log("function called")
         if($scope.shoppingItems.indexOf($scope.selectItem)==-1)
         {
            alert("Please select an item to remove")
         }
         else{
            var index=$scope.shoppingItems.indexOf($scope.selectItem)
            $scope.shoppingItems.splice(index,1)
            $scope.selectItem=""
         }
      }
   });
</script>
```

```
</head>
<body ng-app="myApp">
<div ng-controller="myCntrl">
   <h2>Shopping Application</h2>
   <h4>List of Shopping Items</h4>
   <table border="1">
      <tr>
         <th>SLNO</th>
         <th>Item</th>
      </tr>
      <tr ng-repeat="items in shoppingItems">
         <td>{{$index+1}}</td>
         <td>{{items}}</td>
      </tr>
   </table>
   <br/>
   <div>
   Enter an Item to Add: <input type="text" ng-model="newItem">
   <button ng-click="addItem()">Add Item</button>
</div>

<div>
 Select an Item to Remove:
 <select ng-model="selectItem" ng-options="item for item in shoppingItems"></select>
   <button ng-click="removeItem()">Remove Item</button>
</div>
</div>
</body>
</html>
```

Output:

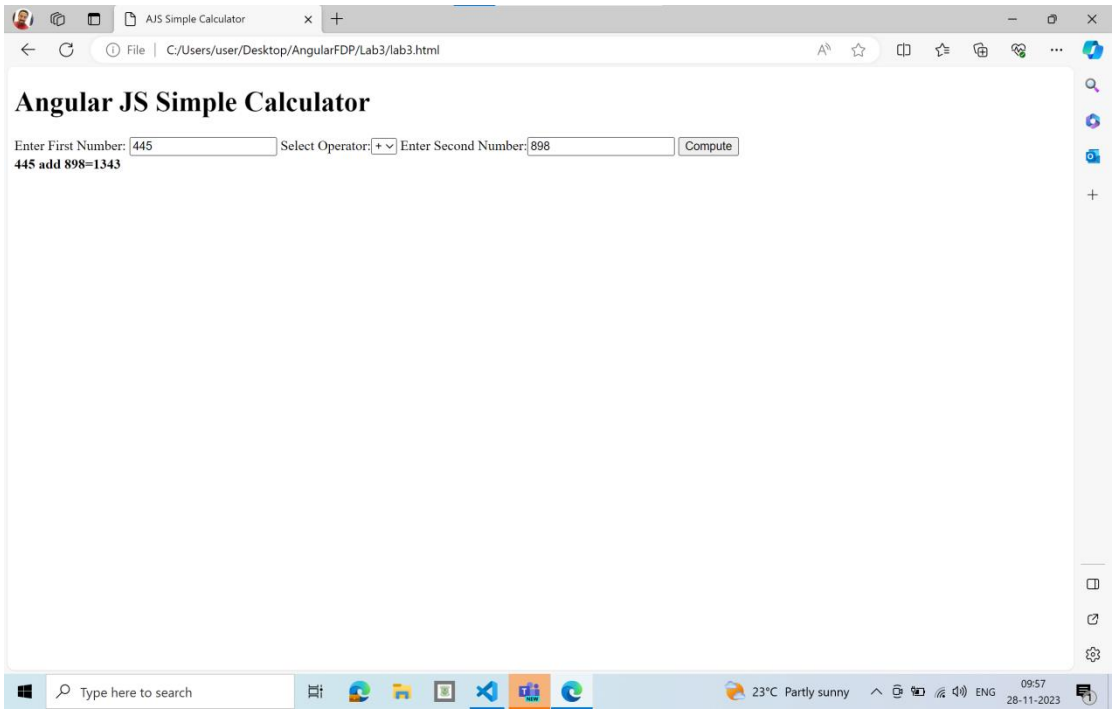

Shopping Items Application
File | C:/Users/user/Desktop/AngularFDP/Lab2/lab2.html
Shopping Application
List of Shopping Items
SLNO
Item
1
Apple
2
Mango
3
Banana
4
Grapes
5
Oragnes
Enter an Item to Add:
Add Item
Select an Item to Remove:
Remove Item
Type here to search
23°C Partly sunny
ENG
09:57
28-11-2023

3. Develop a simple Angular JS calculator application that can perform basic mathematical operations (addition, subtraction, multiplication, division) based on user input.

```
<!DOCTYPE html>
<html>
<title>
    AJS Simple Calculator
</title>
<head>
<script type="text/javascript"
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
</script>
<script>
var app=angular.module("calcApp",[]);
 app.controller("calcCntrl",function($scope)
 {
        $scope.num1=0
        $scope.num2=0
        $scope.result=0
        $scope.operator="add"

        $scope.compute=function(){

            switch($scope.operator){
                case 'add': $scope.result=$scope.num1 + $scope.num2

                            break
                case 'sub': $scope.result=$scope.num1 - $scope.num2

                            break
                case 'mul': $scope.result=$scope.num1 * $scope.num2
                            break
                case 'div': if($scope.num2==0){
                            alert("Divide by zero error")
                            }
                            else{
                              $scope.result=$scope.num1/$scope.num2
                            }}}
 });

</script>
</head>
<body ng-app="calcApp">
    <h1>Angular JS Simple Calculator</h1>

    <div ng-controller="calcCntrl">
```

```
        Enter First Number: <input type="number" ng-model="num1">
        Select Operator:<select ng-model="operator">
            <option value="add">+</option>
            <option value="sub">-</option>
            <option value="mul">*</option>
            <option value="div">/</option>
        </select>
        Enter Second Number:<input type="number" ng-model="num2">
        <button ng-click="compute()">Compute</button>
        <br/>
        <b>{{num1 + " "+operator+ " "+ num2+ "="+result}}</b>
        </div>
</body>
</html>
```

Output:

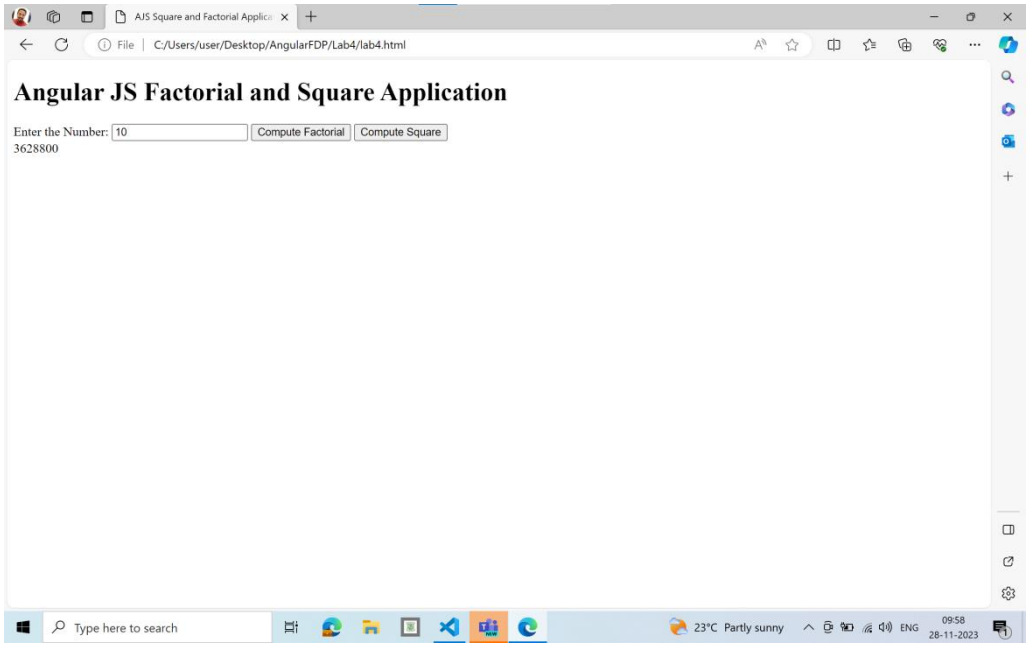


4. Write an Angular JS application that can calculate factorial and compute square based on given user input.

```
<!DOCTYPE html>
<html>
<title>
     AJS Square and Factorial Application
</title>
<head>
   <script type="text/javascript"
  src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
</script>
<script>
    var app=angular.module("mySqFct", []);
    app.controller("mySqFctCntrl", function($scope){
        $scope.num=0
        $scope.result

        $scope.factorial=function()
        {
            if($scope.num==0)
            {
                $scope.result=1
            }
            else{
                $scope.fact=1
                for(var i=$scope.num; i>=1; i--)
                {
                        $scope.fact=$scope.fact*i
                }
                $scope.result=$scope.fact
            }
        }
        $scope.square=function(){
            $scope.result=$scope.num*$scope.num
        }
    });
</script>
</head>
<body ng-app="mySqFct">
<h1> Angular JS Factorial and Square Application</h1>
<div ng-controller="mySqFctCntrl">
     Enter the Number: <input type="number" ng-model="num">
    <button ng-click="factorial()">Compute Factorial</button>


    <button ng-click="square()">Compute Square</button>
```

```
        <br/>


      {{result}}

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

Output:

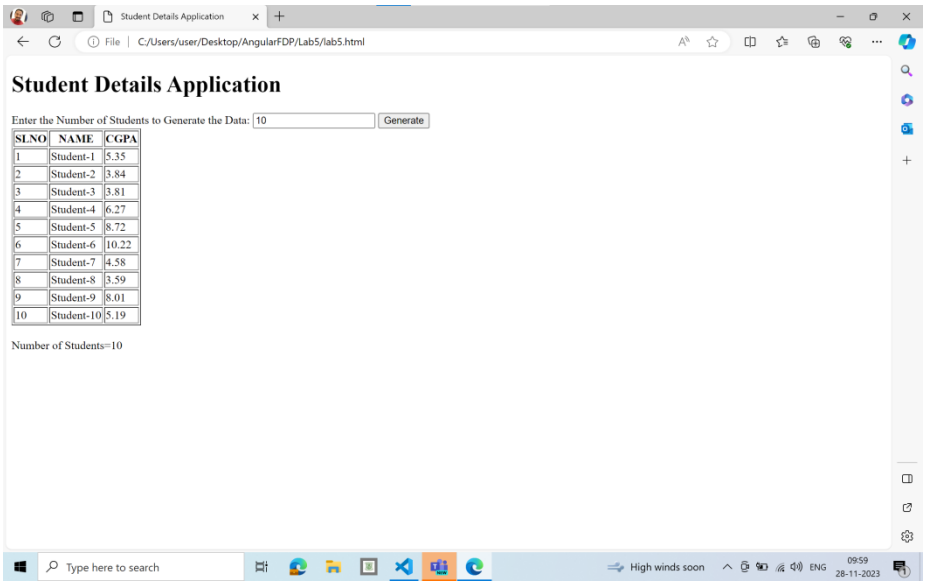


5. Develop AngularJS application that displays a details of students and their CGPA. Allow users to read the number of students and display the count. Note: Student details may be included in the program.

```
<!DOCTYPE html>
<html>
    <title>Student Details Application</title>
    <head>
    <script type="text/javascript"
 src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
    </script>
    <script>
        var app=angular.module("studDetailsApp",[]);
        app.controller("studDetailsAppCntrl",function($scope){
            $scope.studData=[]

            $scope.generateData=function()
            {
                $scope.studData=[]
                for(var i=1;i<=$scope.num;i++)
                {
                    var stud={
                        "SLNO":i,
                        "NAME":'Student-'+i,
                        "CGPA":(Math.random()*10+1).toFixed(2)
                     }
                     $scope.studData.push(stud)
                }
             }
        });
    </script>
    </head>
    <body ng-app="studDetailsApp">
        <h1>Student Details Application</h1>
        <div ng-controller="studDetailsAppCntrl">
            Enter the Number of Students to Generate the Data:
           <input type="number" ng-model="num">
            <button ng-click="generateData()">Generate</button>
            <br/>
            <table border="1" ng-show="studData.length>0">
                <tr>
                    <th>SLNO</th>
                    <th>NAME</th>
                    <th>CGPA</th>
                </tr>
                <tr ng-repeat="student in studData">


                    <td>{{student.SLNO}}</td>
```

```
                    <td>{{student.NAME}}</td>
                    <td>{{student.CGPA}}</td>
                </tr>
            </table>
            <br/>
            Number of Students={{studData.length}}
        </div>
    </body>
</html>
```

Output:

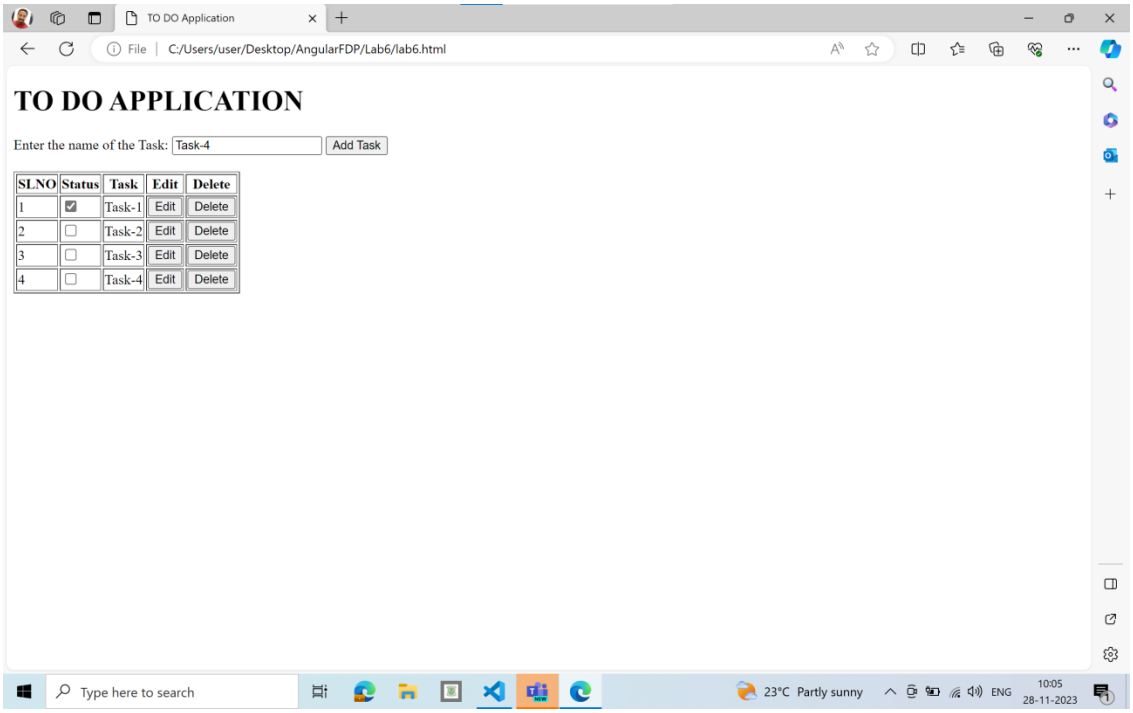


6. Develop an AngularJS program to create a simple to-do list application. Allow users to add, edit, and delete tasks. Note: The default values for tasks may be included in the program.

```
<!DOCTYPE html>
<html>
    <title>TO DO Application</title>
    <head>
        <script type="text/javascript"
  src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
        </script>

        <script>
            var app=angular.module("toDoApp",[]);
            app.controller("toDoAppCntrl",function($scope){
       $scope.tasks=[
       {'TITLE':'Task-1','COMPLETED':true,'EDITING':false},
       {'TITLE':'Task-2','COMPLETED':false,'EDITING':false},
       {'TITLE':'Task-3','COMPLETED':false,'EDITING':false}
                ]

                 $scope.addTask=function(){
                    if($scope.newTask)
                    {
                    var t={
                        'TITLE':$scope.newTask,
                        'COMPLETED':false,
                        'EDITING':false
                    }

                    $scope.tasks.push(t)
                }
                else{
                    alert("Please enter the task to add")
                }
                 }

                 $scope.editTask=function(task)
                 {
                    task.EDITING=true
                 }

                 $scope.turnOffEditing=function(task){
                    task.EDITING=false
                 }

                 $scope.deleteTask=function(task)


                 {
```

```
                    var index=$scope.tasks.indexOf(task)
                     $scope.tasks.splice(index,1)
                   }


            });
        </script>
    </head>

    <body ng-app="toDoApp">
        <h1>TO DO APPLICATION</h1>
        <div ng-controller="toDoAppCntrl">
            Enter the name of the Task:
           <input type="text" ng-model="newTask">
            <button ng-click="addTask()">Add Task</button>
            <br/>
            <br/>
            <table border="1">
                <tr>
                    <th>SLNO</th>
                    <th>Status</th>
                    <th>Task</th>
                    <th>Edit</th>
                    <th>Delete</th>
                </tr>
                <tr ng-repeat="task in tasks">
                    <td>{{$index+1}}</td>
                    <td>
                      <input type="checkbox" ng-model="task.COMPLETED">
                    </td>
                    <td>
          <span ng-show="!task.EDITING">{{task.TITLE}}</span>
            <input type="text" ng-show="task.EDITING"
            ng-model="task.TITLE" ng-    blur="turnOffEditing(task)">
                    </td>
                    <td>
                        <button ng-click="editTask(task)">Edit</button>
                    </td>
                    <td>
                        <button ng-click="deleteTask(task)">Delete</button>
                    </td>
                </tr>
            </table>
            </div>
    </body>
</html>
```

Output:


TO DO Application
File | C:/Users/user/Desktop/AngularFDP/Lab6/lab6.html
TO DO APPLICATION
Enter the name of the Task: Task-4
Add Task
SLNO Status Task Edit Delete
1 Task-1 Edit Delete
2 Task-2 Edit Delete
3 Task-3 Edit Delete
4 Task-4 Edit Delete
Type here to search
23°C Partly sunny
ENG
10:05
28-11-2023

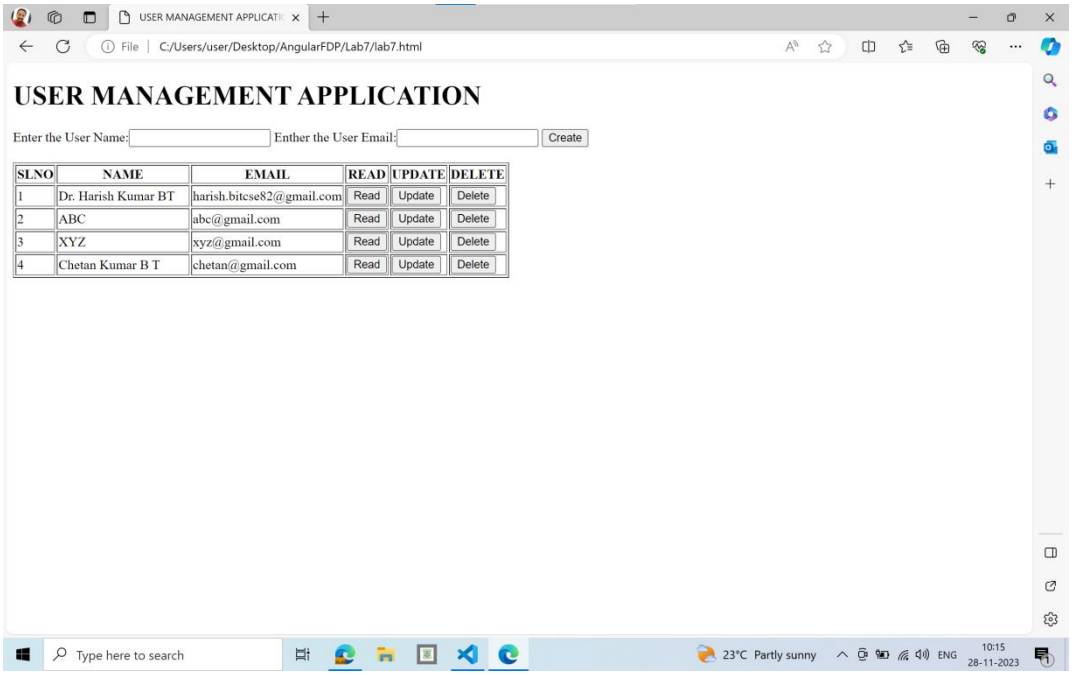
7. Write an AngularJS program to create a simple CRUD application (Create, Read, Update, and Delete) for managing users.

```
<!DOCTYPE html>
<html>
    <title>USER MANAGEMENT APPLICATION</title>
    <head>
        <script type="text/javascript"
  src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
        </script>

         <script>
            var app=angular.module("userMgmtApp",[]);
            app.controller("userMgmtAppCntrl",function($scope){
                $scope.users=[
 {'name':"Dr. Harish Kumar BT",
'email':'harish.bitcse82@gmail.com','editing':false},
 {'name':'ABC','email':'abc@gmail.com','editing':false},
   {'name':'XYZ','email':'xyz@gmail.com','editing':false}
                ]

                $scope.createUser=function()
                {

                    if($scope.newUserName && $scope.newUserEmail)
                    {
                    var u={
                        'name':$scope.newUserName,
                        'email':$scope.newUserEmail,
                        'editing':false
                    }

                    $scope.users.push(u)
                    $scope.newUserName=''
                    $scope.newUserEmail=''
                    }
                    else{
                        alert("Please provide the user name and email id")
                    }

                }

                    $scope.readUser=function(user)
                    {
                        user.editing=true
                    }
```

```
                        $scope.updateUser=function(user){
                        user.editing=false
                    }


                    $scope.deleteUser=function(user)
                    {

                        var yes=confirm("Are you sure you want to delete")
                        if(yes==true)
                        {
                        var index=$scope.users.indexOf(user)

                        $scope.users.splice(index,1)
                        }
                    }

            });

        </script>

    </head>

    <body ng-app="userMgmtApp">

        <h1>USER MANAGEMENT APPLICATION</h1>
        <div ng-controller="userMgmtAppCntrl">

            Enter the User Name:<input type="text" ng-model="newUserName">
            Enther the User Email:<input type="text" ng-model="newUserEmail">
            <button ng-click="createUser()">Create</button>
            <br/>
            <br/>
            <table border="1">
                <tr>
                    <th>SLNO</th>
                    <th>NAME</th>
                    <th>EMAIL</th>
                    <th>READ</th>
                    <th>UPDATE</th>
                    <th>DELETE</th>
                </tr>
                <tr ng-repeat="user in users">
                    <td>{{$index+1}}</td>
                    <td>
          <span
 ng-how="!user.editing">{{user.name}}</span>    
  <input type="text" ng-show="user.editing" ng-model="user.name">
```

```
                    </td>
                    <td>
                        <span ng-show="!user.editing">{{user.email}}</span>
                <input type="text" ng-show="user.editing" ng-model="user.email">
                    </td>
                    <td>
                        <button ng-click="readUser(user)">Read</button>
                    </td>
                    <td>
                        <button ng-click="updateUser(user)">Update</button>
                    </td>
                    <td>
                        <button ng-click="deleteUser(user)">Delete</button>
                    </td>
                </tr>
            </table>

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

Output:

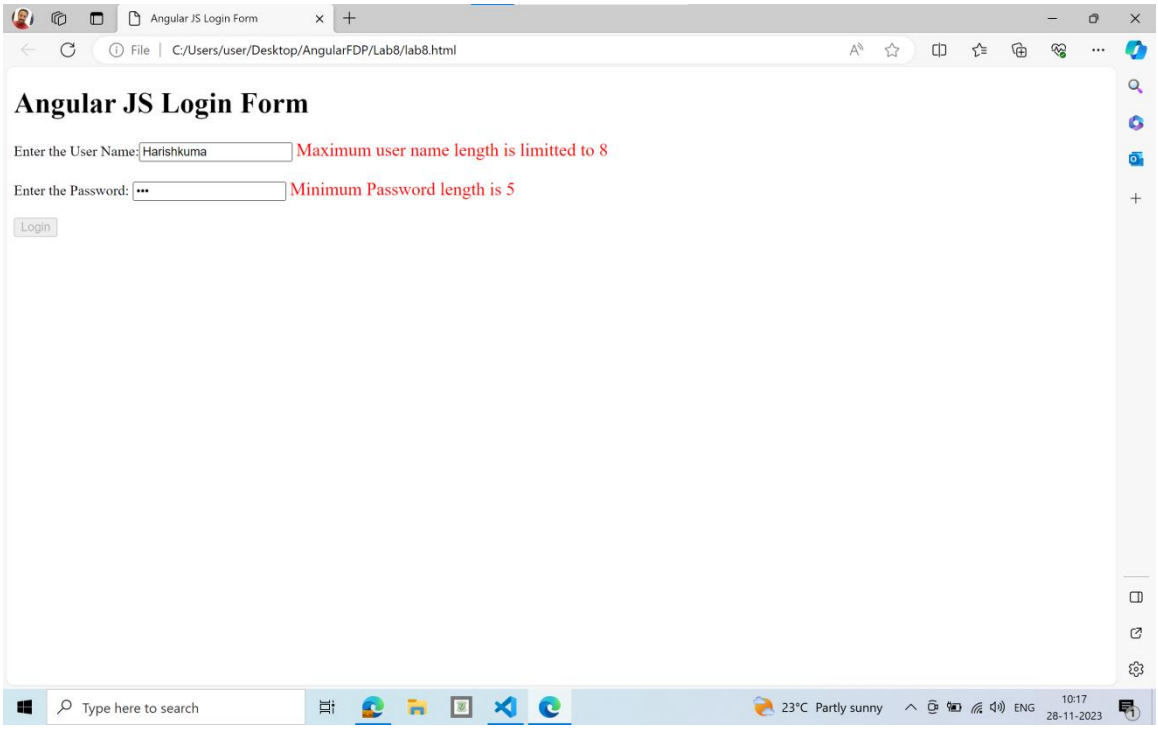


8. Develop AngularJS program to create a login form, with validation for the username and password fields.

```
<!DOCTYPE html>
<html>
    <title>Angular JS Login Form</title>
    <head>
        <script type="text/javascript"
  src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
        </script>

        <script>
            var app=angular.module("loginApp",[]);
            app.controller('loginAppCntrl',function($scope){
                $scope.userName=''
                $scope.password=''

                $scope.noAttempts=0
                $scope.login=function(){
                  //  console.log("Inside login function")

                  if($scope.userName=="harish" &&
$scope.password=="12345678")
                  {
                    alert("Login Successfull")
                  }
                  else{
                    $scope.noAttempts++
                    if($scope.noAttempts<=3)
                    {
                    alert("Incorrect user name/password! Attempt No.
"+$scope.noAttempts)
                    }
                    else{
                        document.getElementById("loginButton").disabled=true
                    }

                  }
                }


            });
        </script>
        <style>
            .error-message{
                color:red;
                font-size: 20px;
```

```
            }
           </style>
    </head>

    <body ng-app="loginApp" ng-controller="loginAppCntrl">

      <h1>Angular JS Login Form</h1>
      <form name="loginForm" ng-submit="submitForm()">

            Enter the User Name:<input type="text" name="userName"
ng-model="userName" ng-minlength="5" ng-maxlength="8" required placeholder="Enter
User Name">
            <span class="error-message"
 ng-show="loginForm.userName.$error.required && loginForm.userName.$dirty">User
Name is Required</span>
  <span class="error-message"
ng-show="loginForm.userName.$error.minlength">Minimum Length Must be 5</span>
            <span class="error-message"
ng-show="loginForm.userName.$error.maxlength">Maximum user name length is limitted
to 8</span>
            <br/>
            <br/>
            Enter the Password: <input type="password" name="password"
ng-model="password" ng-minlength="5" ng-maxlength="8" required placeholder="Enter
your password">
            <span class="error-message" ng-show="loginForm.password.$error.required
&& loginForm.password.$dirty">Password is required</span>
            <span class="error-message"
ng-show="loginForm.password.$error.minlength">Minimum Password length is 5</span>
            <span class="error-message"
ng-show="loginForm.password.$error.maxlength">Maximum password length is limitted
to 8</span>
            <br/>
            <br/>
            <button type="submit" ng-disabled="loginForm.$invalid"
 ng-click="login()" id="loginButton">Login</button>

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

Output:

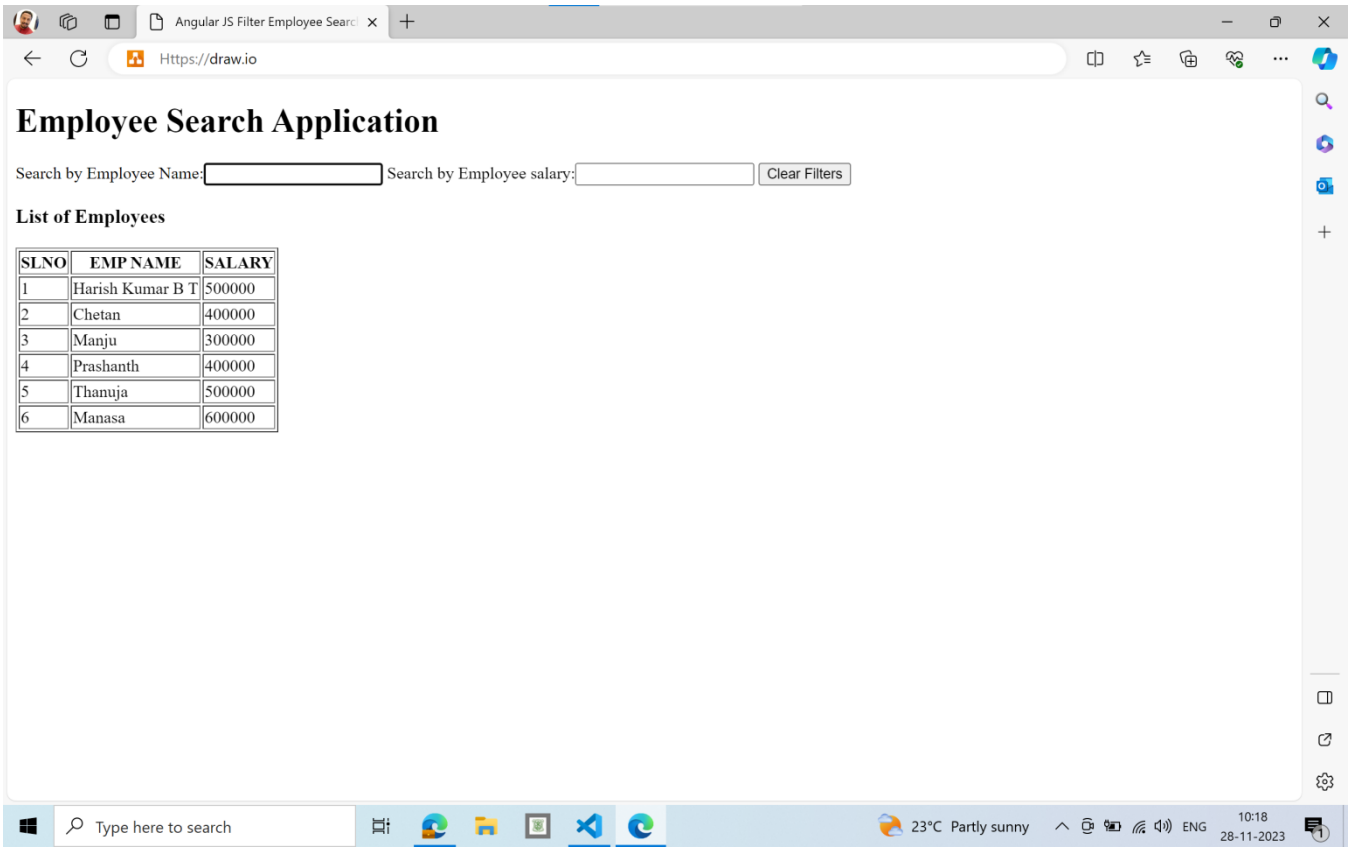

Angular JS Login Form
File | C:/Users/user/Desktop/AngularFDP/Lab8/lab8.html
Angular JS Login Form
Enter the User Name: Harishkuma
Maximum user name length is limitted to 8
Enter the Password: •••
Minimum Password length is 5
Login
Type here to search
23°C Partly sunny
ENG
10:17
28-11-2023

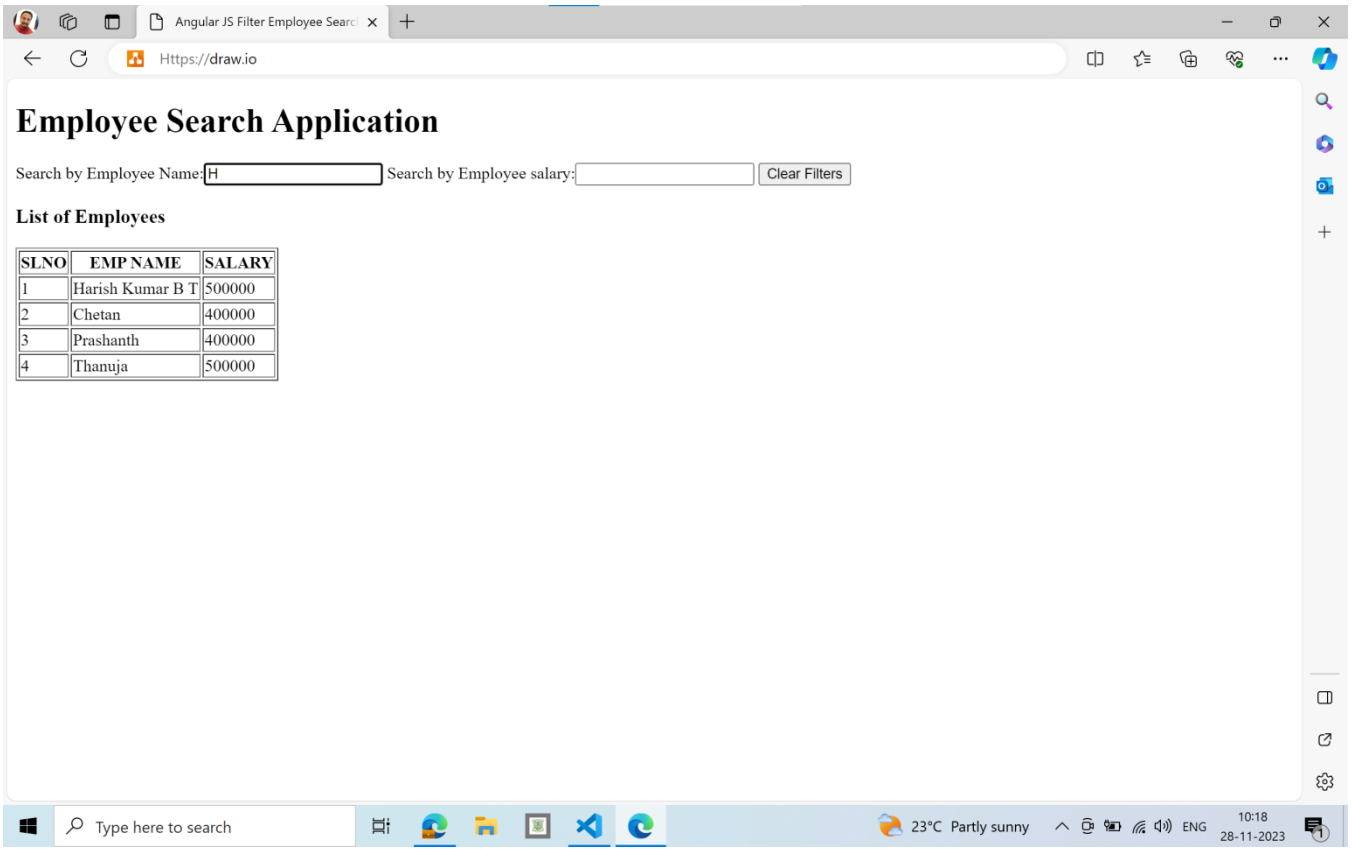
9. Create an AngularJS application that displays a list of employees and their salaries. Allow users to search for employees by name and salary. Note: Employee details may be included in the program.

```
<!DOCTYPE html>
<html>
    <title>Angular JS Filter Employee Search Application</title>
    <head>
        <script type="text/javascript"
        src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.mi
n.js">
        </script>

        <script>
            var app=angular.module("empSearchApp",[]);
            app.controller("empSearchAppCntrl",function($scope){
                $scope.empList=[
                    {'name':'Harish Kumar B T','salary':500000},
                    {'name':'Chetan','salary':400000},
                    {'name':'Manju','salary':300000},
                    {'name':'Prashanth','salary':400000},
                    {'name':'Thanuja','salary':500000},
                    {'name':'Manasa','salary':600000}
                ]

                    $scope.clearFilters=function()
                    {
                        $scope.searchName=''
                        $scope.searchSalary=''
                    }

            });
        </script>
    </head>

    <body ng-app="empSearchApp">
        <h1>Employee Search Application</h1>
        <div ng-controller="empSearchAppCntrl">
            Search by Employee Name:<input type="text" ng-model="searchName">
            Search by Employee salary:<input type="number"
 ng-model="searchSalary">

            <button ng-click="clearFilters()">Clear Filters</button>
            <br/>
            <h3>List of Employees</h3>
            <table border="1">
```

```
                    <tr>
                        <th>SLNO</th>
                    <th>EMP NAME</th>
                    <th>SALARY</th>
                </tr>
                <tr ng-repeat="emp in empList |
filter:{name:searchName,salary:searchSalary}">
                    <td>{{$index+1}}</td>
                    <td>{{emp.name}}</td>
                    <td>{{emp.salary}}</td>

                </tr>

            </table>

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

Output:



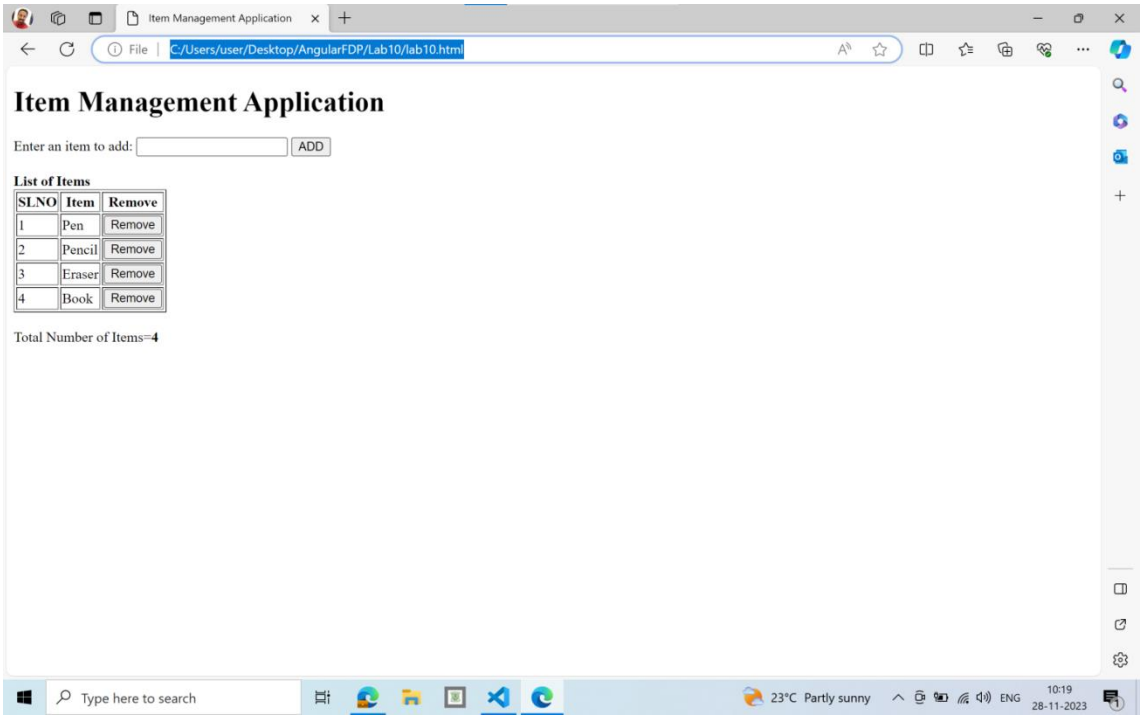

Angular JS Filter Employee Searc
Https://draw.io
Employee Search Application
Search by Employee Name:H
Search by Employee salary:
Clear Filters
List of Employees
SLNO
EMP NAME
SALARY
1
Harish Kumar B T
500000
2
Chetan
400000
3
Prashanth
400000
4
Thanuja
500000
Type here to search
23°C Partly sunny
ENG
10:18
28-11-2023

10. Create AngularJS application that allows users to maintain a collection of items. The application should display the current total number of items, and this count should automatically update as items are added or removed. Users should be able to add items to the collection and remove them as needed.
Note: The default values for items may be included in the program.

```
<!DOCTYPE html>
<html>
    <title>Item Management Application</title>
    <head>
        <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
        </script>

        <script>
            var app=angular.module("itemMgmtApp",[]);
            app.controller("itemMgmtAppCntrl",function($scope){
                $scope.itemList=['Pen','Pencil','Eraser','Book']


                $scope.addItem=function()
                {
                    if($scope.newItem)
                    {
                        if($scope.itemList.indexOf($scope.newItem)==-1)
                        {
                            $scope.itemList.push($scope.newItem)
                        }
                        else{
                    alert('This item is already there in the item collection')
                        }
                    }
                    else{
                        alert('Please Enter the item to add')
                    }
                }

                $scope.removeItem=function(item)
                {
                    var yes=confirm("Are you sure you want to delete "+item)
                    if(yes==true)
                    {
                        var index=$scope.itemList.indexOf(item)
                        $scope.itemList.splice(index,1)
                    }


                }
```

```
            });
        </script>
    </head>
    <body ng-app="itemMgmtApp">
    <h1>Item Management Application</h1>

    <div ng-controller="itemMgmtAppCntrl">
        Enter an item to add: <input type="text" ng-model="newItem">
        <button ng-click="addItem()">ADD</button>
        <br/><br/>

        <b>List of Items</b>
        <table border="1">
            <tr>
                <th>SLNO</th>
                <th>Item</th>
                <th>Remove</th>
            </tr>
            <tr ng-repeat="item in itemList">
                <td>{{$index+1}}</td>
                <td>{{item}}</td>
                <td><button ng-click=removeItem(item)>Remove</button></td>

            </tr>
        </table>
        <br/>

        Total Number of Items=<b>{{itemList.length}}</b>
    </div>

    </body>
</html>
```

Output:

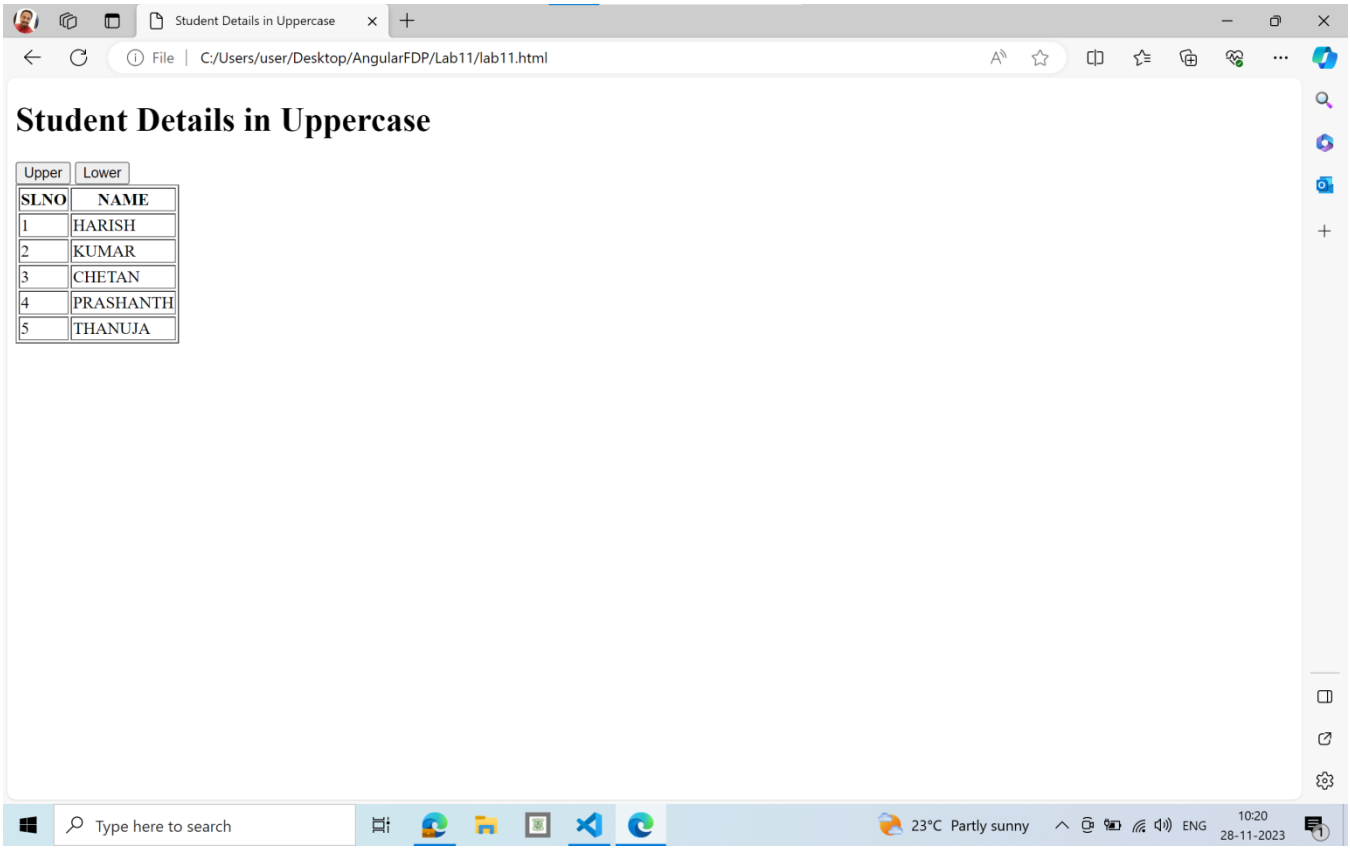

Item Management Application
File
C:/Users/user/Desktop/AngularFDP/Lab10/lab10.html
Item Management Application
Enter an item to add:
ADD
List of Items
SLNO
Item
Remove
1
Pen
Remove
2
Pencil
Remove
3
Eraser
Remove
4
Book
Remove
Total Number of Items=4
Type here to search
23°C Partly sunny
ENG
10:19
28-11-2023

11. Create AngularJS application to convert student details to Uppercase using angular filters.
    Note: The default details of students may be included in the program.

```
<!DOCTYPE html>
<html>
    <title>Student Details in Uppercase</title>
    <head>
        <script type="text/javascript"
 src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
        </script>

        <script>
            var app=angular.module("studDetailsUpperApp",[]);
            app.controller("studDetailsUpperAppCntrl",function($scope){
        $scope.studDetails=['harish','kumar','chetan','prashanth','thanuja']
                $scope.upper=true
                $scope.lower=false


                $scope.Lower=function()
                {
                    //console.log('called')
                    $scope.upper=false
                    $scope.lower=true
                }

                $scope.Upper=function()
                {
                    $scope.upper=true
                    $scope.lower=false
                }
            });
        </script>
    </head>

    <body ng-app="studDetailsUpperApp">
        <h1>Student Details in Uppercase</h1>
        <div ng-controller="studDetailsUpperAppCntrl">
            <button ng-click="Upper()">Upper</button>
            <button ng-click="Lower()">Lower</button>
            <table border="1">
                <tr>
                    <th>SLNO</th>
                    <th>NAME</th>
```

```
                </tr>
                <tr ng-repeat="student in studDetails">
                    <td>{{$index+1}}</td>
                    <td ng-show="upper">{{student|uppercase}}</td>
                    <td ng-show="lower">{{student|lowercase}}</td>
                </tr>
            </table>
        </div>

    </body>
</html>
```

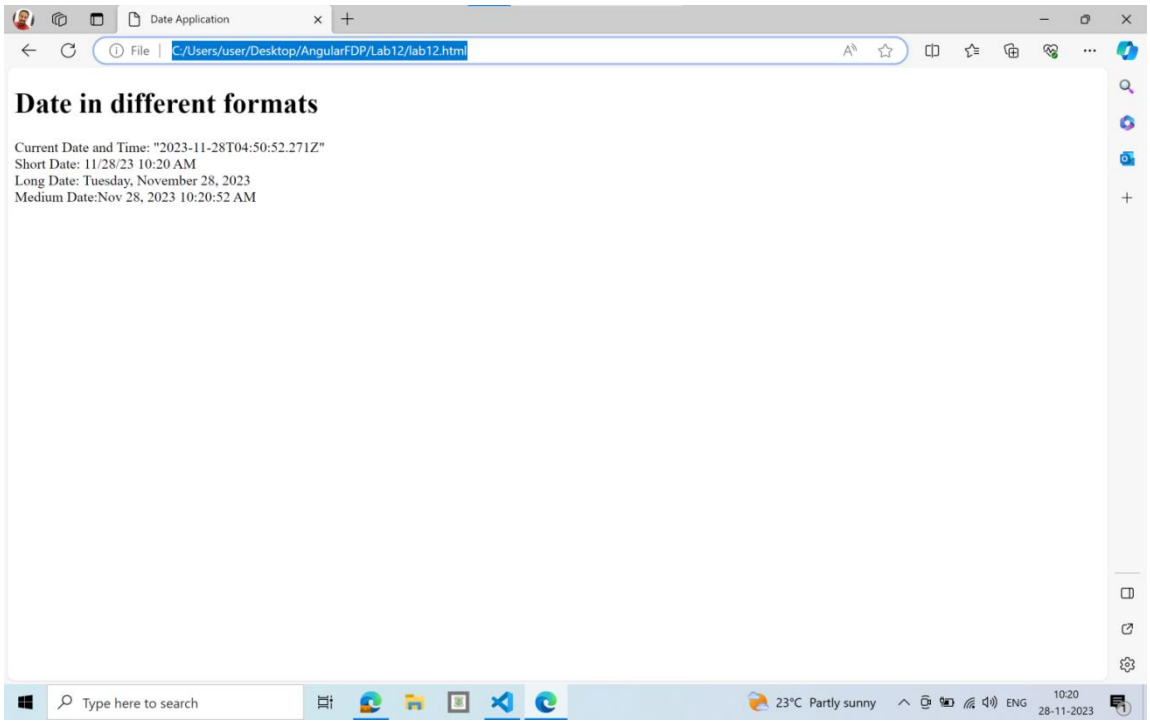
Output:



12. Create an AngularJS application that displays the date by using date filter parameters.

```
<!DOCTYPE html>
<html>
    <title>Date Application</title>
    <head>
        <script type="text/javascript"
  src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
        </script>

     <script>
        var app=angular.module("dateApp",[]);
        app.controller("dateAppCntrl",function($scope){
            $scope.currentDate=new Date();
        });
     </script>
    </head>
    <body ng-app="dateApp">
        <h1>Date in different formats</h1>
        <div ng-controller="dateAppCntrl">

            Current Date and Time: {{currentDate}}<br/>
            Short Date: {{currentDate|date: 'short'}}<br/>
            Long Date: {{currentDate |date: 'fullDate'}}<br/>
            Medium Date:{{currentDate| date: 'medium'}}
        </div>
    </body>
</html>
```

Output:


Date Application
File | C:/Users/user/Desktop/AngularFDP/Lab12/lab12.html
Date in different formats
Current Date and Time: "2023-11-28T04:50:52.271Z"
Short Date: 11/28/23 10:20 AM
Long Date: Tuesday, November 28, 2023
Medium Date:Nov 28, 2023 10:20:52 AM
Type here to search
23°C Partly sunny
ENG
10:20
28-11-2023

Sample Programs

1. Example Program on Angular expression

```
<!DOCTYPE html>
<html>
    <title>
        This is my first angular progarm
    </title>
    <head>
    <script type="text/javascript"
  src="https:\\ajax.googleapis.com\ajax\libs\angularjs\1.8.2\angular.min.js"
>
    </script>
    </head>
    <body>
        <div ng-app="">
            {{5+5}}
        </div>

    </body>
</html>
```

2. Example on ng-model, ng-bind, ng-init

```
<!DOCTYPE html>
<html>
    <title>Demo example on ng-model</title>
    <head>
        <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js
">
    </script>
    </head>
    <body>
        <div ng-app="" ng-init="age=41">
            Enter Your Name: <input type="text" ng-model="name"><br/>
            Your Name is using angular expression: {{name}} <br/>
            Your Name is using ng-bind:   <p ng-bind="name"></p><br/>
            your age is: <p ng-bind="age"></p>
        </div>

    </body>
</html>
```

3. Example on ng-click

```
<!DOCTYPE html>
<html>
    <title>
        Demo on ng-click directive
    </title>
    <head>
        <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js
">
    </script>

    <script>
        var app=angular.module("myApp",[]);
        app.controller("myCntrl",function($scope){
            $scope.num1=20
            $scope.num2=30
            $scope.result

        $scope.add=function()
        {
            console.log("Function Called")
            $scope.result=$scope.num1 + $scope.num2
           // return $scope.result
        }

        });
    </script>
    </head>

    <body>
        <div ng-app="myApp" ng-controller="myCntrl">
            Click the button to get the result
            <button ng-click="add()">Click Here</button><br/>
            Result: {{result}}
        </div>
    </body>
</html>
```

4. Addition program

```
<!DOCTYPE html>

<html>
    <title>
        Addition Program
    </title>

    <head>
      <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js
">

      </script>

      <script>

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

        app.controller("myCntrl",function($scope){
            $scope.num1=0
            $scope.num2=0
            $scope.result=0

            $scope.add=function()
            {
                $scope.result=$scope.num1 + $scope.num2
            }

        });

      </script>

    </head>

    <body ng-app="myApp">

        <h1>Addition Program</h1>

        <div ng-controller="myCntrl">

            Enter First Number: <input type="number" ng-model="num1"><br/>
            Enter Second Number: <input type="number" ng-model="num2"><br/>
            <button ng-click="add()">ADD</button><br/>
            Sum of {{num1}} and {{num2}} = {{result}}

        </div>

    </body>
</html>
```

5. Example on rootScope and Controller scope variables

```
<!DOCTYPE html>

<html>
    <title>Demo on root scope variable</title>
<head>
    <script type="text/javascript"
  src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
>
</script>

<script>

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

app.run(function($rootScope){
    $rootScope.dept1="CSE"
    $rootScope.dept2="ECE"
});

app.controller("myCntrl", function($scope){
    $scope.name1="Harish Kumar B T"
});

app.controller("myAnotherCntrl", function($scope){
    $scope.name2="Chetan Kumar B T"
});

</script>

</head>

<body ng-app="myApp">
    <div ng-controller="myCntrl">
     Dept. of {{dept1}} Faculties<br/>
     1. {{name1}}
     2. {{name2}}

    </div>

    <div ng-controller="myAnotherCntrl">
    Dept. of {{dept2}} Faculties<br/>
        1. {{name1}}
        2. {{name2}}
    </div>

</body>
</html>
```

6. Example on ng-options

```
<!DOCTYPE html>

<html>

<title> Demo on Using the ng-options to fill the dropdown list from the list
of values</title>
<head>
    <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js
">
</script>

<script>
    var app=angular.module("myApp",[]);

    app.controller("myCntrl",function($scope){
        $scope.myList=['Apple','Mango','Banana','Orange']
    });
</script>
</head>
<body ng-app="myApp">

    <div ng-controller="myCntrl">
        List of Fruits: <select ng-model="selectFruit" ng-options="fruit for
fruit in myList"></select>

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

7. Example on ng-repeat

```
<!DOCTYPE html>

<html>

<title>
    Demo on using ng-repeat
</title>

<head>
    <script type="text/javascript"
   src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js
">
</script>

<script>
    var app=angular.module("myApp",[]);

    app.controller("myCntrl",function($scope){
        $scope.myList=['Cow','Lion','Tiger','Deer','Sheep']

    });
</script>
</head>

<body ng-app="myApp">

    <div ng-controller="myCntrl">

        <ul>
            <li ng-repeat="animal in myList">{{animal}}</li>
        </ul>
    </div>
</body>
</html>
```

8. Example on ng-show

```
<!DOCTYPE html>

<html>
    <title>
        Demo pgm on using ng-show directive
    </title>

    <head>
        <script type="text/javascript"
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
    </script>

    <script>

var app=angular.module("myApp",[]);
app.controller("myCntrl",function($scope){
    $scope.display=true;
});
    </script>
    </head>

    <body ng-app="myApp">
        <div ng-controller="myCntrl">
            <li ng-show="display">Harish</li>
        </div>
    </body>
</html>
```

9. Example on random number generation

```
<!DOCTYPE html>
<html>
    <title>Random Number Generation Demo</title>
    <head>
    <script type="text/javascript"
  src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
>
    </script>

    <script>

    var app=angular.module("myApp",[]);
    app.controller("myCntrl",function($scope){
        $scope.randomList=[]

        $scope.generateRandomNumbers=function(){
            $scope.randomList=[]
            for(var i=1;i<=$scope.num;i++)
            {

               $scope.randomList.push((Math.random()*$scope.num+1).toFixed(2
))
            }
        }
    });
    </script>
    </head>
    <body ng-app="myApp">
        <div ng-controller="myCntrl">
            Enter the Number of random numbers to be generated: <input
type="numbers" ng-model="num">
            <button ng-
click="generateRandomNumbers()">Generate</button><br/>
            <li ng-repeat="x in randomList">{{x}}</li>
        </div>
    </body>
</html>
```

10. Example on student List Object

```
<!DOCTYPE html>

<html>
<title> Demo on List of Student Objects</title>

<head>
    <script type="text/javascript"
 src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
</script>

<script>

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

  app.controller("studListAppCntrl", function($scope){
     $scope.studList=[
       {'USN':'1BI20CS001','NAME':'ABC','DEPT':'CSE','SEM':7,'MARKS':78},
       {'USN':'1BI20EC002','NAME':'XYZ','DEPT':'ECE','SEM':6,'MARKS':89},
       {'USN':'1BI20EE003','NAME':'PQR','DEPT':'EEE','SEM':7,'MARKS':56},
       {'USN':'1BI20CS002','NAME':'LMN','DEPT':'CSE','SEM':7,'MARKS':90},
                  ]
  });

</script>
</head>
<body ng-app="studListApp">

    <h1>Student List</h1>

    <div ng-controller="studListAppCntrl">

        <table border="1">
            <tr>
                <th>USN</th>
                <th>NAME</th>
                <th>DEPT</th>
                <th>SEM</th>
                <th>MARKS</th>
            </tr>
            <tr ng-repeat="student in studList">
                <td>{{student.USN}}</td>
                <td>{{student.NAME}}</td>
                <td>{{student.DEPT}}</td>
                <td>{{student.SEM}}</td>
                <td>{{student.MARKS}}</td>

            </tr>
        </table>

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

11.Example on ng-blur

```
<!DOCTYPE html>
<html>
    <title>
        Demo on ng-blur directive
    </title>
    <head>
    <script type="text/javascript"
 src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js">
    </script>
    </head>
    <body ng-app="">
        Keep focus and keep losing focus from me to get the action done:
<input type="text" ng-model="name" ng-init="count=0"
 ng-blur="count=count+1">
        <br/>
        {{count}}
    </body>
</html>
```