ANGULAR JS (21CSL581)

Q1. 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.

Program: -

```
<!DOCTYPE html>
<html>
<head>
    <!-- Link Your CSS If You Want  -->
    <link rel="stylesheet" href="Stylesheet.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-app="" ng-init="firstName='Aak'; lastName='Riti'">
    <input type="text" ng-model="firstName">
    <input type="text" ng-model="lastName">
    <h2>{{ firstName + ' ' + lastName }}</h2>
</body>
</html>
```

Output: -

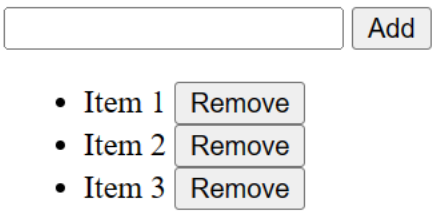
Q2. Develop an Angular JS application that displays a list of shopping items. Allow users to add and remove items from the list using directives and controllers.

Note: The default values of items may be included in the program.

Program: -

```
<!DOCTYPE html>
<html>
<head>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
    <script>
        angular.module('shoppingApp', []).controller('ShoppingController',
['$scope', function($scope) {
            $scope.items = ['Item 1', 'Item 2', 'Item 3'];
            $scope.updateItem = function(item) {
                item ? $scope.items.push(item) : $scope.items.pop();
                $scope.newItem = '';
            };
        }]);
    </script>
</head>
<body ng-app="shoppingApp" ng-controller="ShoppingController">
    <input ng-model="newItem">
    <button ng-click="updateItem(newItem)">Add</button>
    <ul>
        <li ng-repeat="item in items">{{ item }}
            <button ng-click="updateItem()">Remove</button>
        </li>
    </ul>
</body>
</html>
```

Output: -



Q3. Develop a simple Angular JS calculator application that can perform basic mathematical operations (addition, subtraction, multiplication, division) based on user input.

Program: -

```
<!DOCTYPE html>
<html>
<head>
    <!-- Link Your CSS If You Want  -->
    <link rel="stylesheet" href="Stylesheet.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-app="">
    <input type="number" ng-model="num1">
    <input type="number" ng-model="num2">
    <button ng-click="result = num1 + num2">+</button>
    <button ng-click="result = num1 - num2">-</button>
    <button ng-click="result = num1 * num2">*</button>
    <button ng-click="result = num1 / num2">/</button>
    <div>Result: {{ result }}</div>
</body>
</html>
```

Output: -

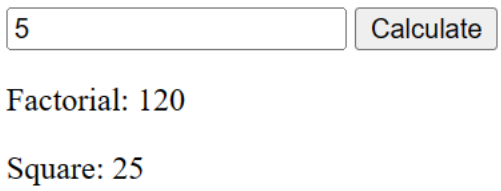
Q4. Write an Angular JS application that can calculate factorial and compute square based on given user input.

Program: -

```
<!DOCTYPE html>
<html ng-app="myApp">
<head>
    <!-- Link Your CSS If You Want  -->
    <link rel="stylesheet" href="Stylesheet.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
    <script>
        angular.module('myApp', []).controller('myCtrl', function($scope) {
            $scope.fact = function(n) {
                return n < 2 ? 1 : n * $scope.fact(n - 1);
            };
        });
    </script>
</head>
<body ng-controller="myCtrl">
    <input type="number" ng-model="n">
    <button ng-click="fr = fact(n); sr = n * n">Calculate</button>

    <p>Factorial: {{ fr }}</p>
    <p>Square: {{ sr }}</p>
</body>
</html>
```

Output: -



Q5. Develop AngularJS application that displays a detail 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.

Program: -

```
<html>
<head>
    <!-- Link Your CSS If You Want  -->
    <!-- <link rel="stylesheet" href="Stylesheet.css">  -->
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.0/angular.min.js"></s
cript>
</head>
<body ng-app ng-init="s=[{ usn: '1OX21CS000', name: 'S', cgpa: 8.5 }]">
    <h2>Student Details</h2>
    <input ng-model="ns.usn" placeholder="USN">
    <input ng-model="ns.name" placeholder="Name">
    <input type="number" ng-model="ns.cgpa" placeholder="CGPA">
    <button ng-click="s.push(ns); ns={}">Add</button>
    <table border="1">
        <tr>
            <th>USN</th>
            <th>Name</th>
            <th>CGPA</th>
        </tr>
        <tr ng-repeat="st in s | orderBy:'usn'">
            <td>{{ st.usn }}</td>
            <td>{{ st.name }}</td>
            <td>{{ st.cgpa }}</td>
        </tr>
    </table>
    <p>Total students: {{ s.length }}</p>
</body>
</html>
```

Output: -

Student Details

USN | Name | CGPA | Add

USN	Name	CGPA
1OX21CS000	R	8.5
1OX21CS000	S	9.5

Total students: 2

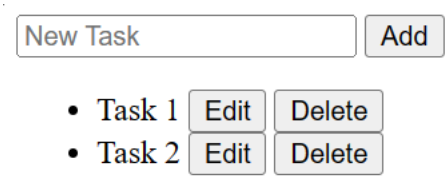
Q6. Develop an AngularJS program to create a simple to-do list application. Allow users to add, edit, and delete tasks.

Note: The default values for tasks may be included in the program.

Program: -

```
<!DOCTYPE html>
<html ng-app="">
<head>
    <!-- Link Your CSS If You Want  -->
    <!-- <link rel="stylesheet" href="Stylesheet.css">  -->
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-init="tasks=[{text:'Task 1', editing:false}, {text:'Task 2',
editing:false}]">
    <input ng-model="newTask" placeholder="New Task">
    <button ng-click="tasks.push({text: newTask, editing: false});
newTask=''">Add</button>
    <ul>
        <li ng-repeat="task in tasks">
            <span ng-hide="task.editing" ng-bind="task.text"></span>
            <input ng-show="task.editing" ng-model="task.text">
            <button ng-click="task.editing = !task.editing">{{task.editing ?
'Done' : 'Edit'}}</button>
            <button ng-click="tasks.splice($index, 1)">Delete</button>
        </li>
    </ul>
</body>
</html>
```

Output: -

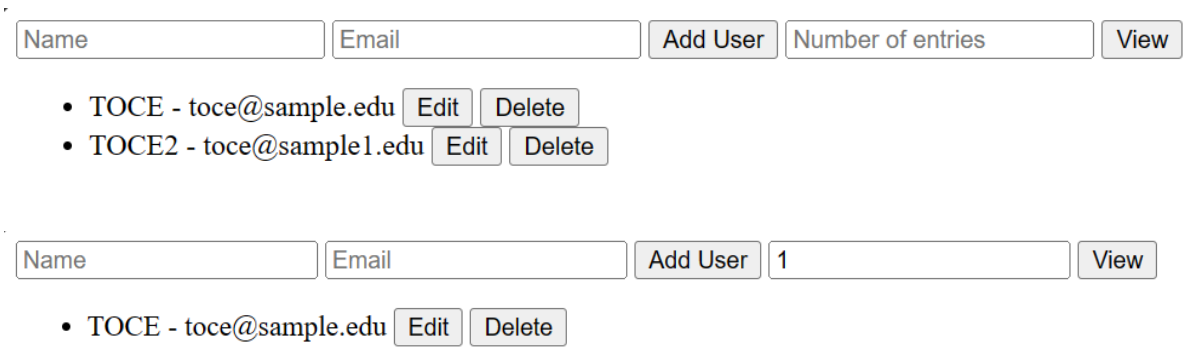


Q7.Write an AngularJS program to create a simple CRUD application (Create, Read, Update, and Delete) for managing users.

Program: -

```
<!DOCTYPE html>
<html lang="en" ng-app>
<head>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-init="uList=[]; nUser={}; editIndex=-1; numEntries=1">
    <input ng-model="nUser.name" placeholder="Name">
    <input ng-model="nUser.email" placeholder="Email">
    <button ng-click="uList.push({name: nUser.name, email: nUser.email});
nUser={}">Add User</button>
    <input type="number" ng-model="numEntries" placeholder="Number of
entries">
    <button ng-click="selectedEntries = numEntries">View</button>
    <ul>
        <li ng-repeat="user in uList | limitTo:selectedEntries">
            <span ng-if="editIndex !== $index">{{ user.name }} - {{ user.email
}}</span>
            <button ng-click="editIndex = editIndex === $index ? -1 : $index">
                {{ editIndex === $index ? 'Save' : 'Edit' }}
            </button>
            <button ng-click="uList.splice($index, 1)">Delete</button>
            <div ng-if="editIndex === $index">
                <input ng-model="user.name">
                <input ng-model="user.email">
            </div>
        </li>
    </ul>
</body>
</html>
```

Output: -



Q8. Develop AngularJS program to create a login form, with validation for the username and password fields.

Program: -

```
<!DOCTYPE html>
<html>
<head>
    <!-- Link Your CSS If You Want  -->
    <!-- <link rel="stylesheet" href="Stylesheet.css">  -->
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-app>
    <form ng-submit="submitted = true">
        <input type="text" ng-model="user.username" placeholder="Username"
required>
        <input type="password" ng-model="user.password" placeholder="Password"
required>
        <button type="submit">Login</button>
    </form>
    <div ng-if="submitted">Login successful!</div>
</body>
</html>
```

Output: -

Login successful!

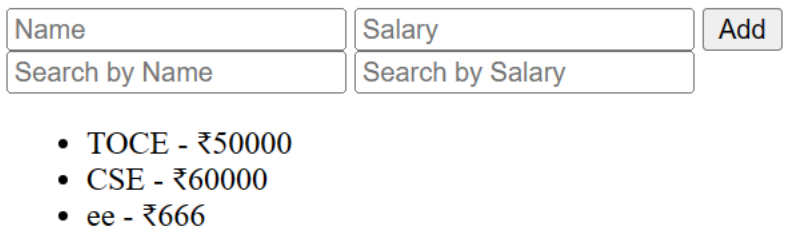
Q9. Create an AngularJS application that displays a list of employees and their salaries. Allow users to search for employees by name and salary.

Note: Employee details may be included in the program.

Program: -

```
<!DOCTYPE html>
<html ng-app="">
<head>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-init="emps=[{n: 'TOCE ', s: 50000}, {n: 'CSE', s: 60000}]">
    <form ng-submit="emps.push({n: n, s: s}); n=''; s=null">
        <input ng-model="n" placeholder="Name">
        <input type="number" ng-model="s" placeholder="Salary">
        <button type="submit">Add</button>
    </form>
    <input ng-model="sName" placeholder="Search by Name">
    <input ng-model="sSalary" type="number" placeholder="Search by Salary">
    <ul>
        <li ng-repeat="emp in emps | filter:{n: sName, s: (sSalary ||
undefined)}">
            {{ emp.n }} - ₹{{ emp.s }}
        </li>
    </ul>
</body>
</html>
```

Output: -



Q10. 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.

Program: -

```
<!DOCTYPE html>
<html ng-app>
<head>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-init="items=['Item 1', 'Item 2']">
    <input ng-model="newItem">
    <button ng-click="newItem && items.push(newItem); newItem =
'';">Add</button>
    <ul>
        <li ng-repeat="item in items">
            {{ item }}
            <button ng-click="items.splice($index, 1)">Remove</button>
        </li>
    </ul>
    Total Items: {{ items.length }}
</body>
</html>
```

Output: -

Q11. Create AngularJS application to convert student details to Uppercase using angular filters.

Note: The default details of students may be included in the program.

Program: -

```
<!DOCTYPE html>
<html>
<head>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-app ng-init="students=[{usn:'1ox21CS000',
name:'Demo'},{usn:'1oX21CS001', name:'xyz'}]; uppercase=false">
    <label>
        <input type="checkbox" ng-model="uppercase"> Convert to Uppercase
    </label>
    <table border="1">
        <tr>
            <th>USN</th>
            <th>Name</th>
        </tr>
        <tr ng-repeat="student in students">
            <td>{{ uppercase ? (student.usn | uppercase) : student.usn }}</td>
            <td>{{ uppercase ? (student.name | uppercase) : student.name
}}</td>
        </tr>
    </table>
</body>
</html>
```

Output: -

☐ Convert to Uppercase

USN	Name
1ox21CS000	Demo
1oX21CS001	xyz

☑ Convert to Uppercase

USN	Name
1OX21CS000	DEMO
1OX21CS001	XYZ

Q12. Create an AngularJS application that displays the date by using date filter parameters.

Program: -

```
<!DOCTYPE html>
<html ng-app="myApp">
<head>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"></s
cript>
</head>
<body ng-controller="myController">
    <p>Current Date: {{ currentDate }}</p>
    <p>Full Date: {{ currentDate | date }}</p>
    <p>Short Date: {{ currentDate | date: 'short' }}</p>
    <p>Medium Date: {{ currentDate | date: 'medium' }}</p>
</body>
</html>
<script>
angular.module('myApp', []).controller('myController', function($scope) {
    $scope.currentDate = new Date();
});
</script>
```

Output: -

Current Date: "2024-01-02T00:32:21.717Z"

Full Date: Jan 2, 2024

Short Date: 1/2/24 6:02 AM

Medium Date: Jan 2, 2024 6:02:21 AM