**Course Code: CSE3150**

**Course Title: Front End Full Stack Development**

**Lab sheet 12 - Module 3**

**Problem Statement:**

Design a webpage using angular js, that displays a table of planets with columns for name, type, distance from the sun, and number of moons. The user can search for planets using the search box, and sort the table by name, type, distance, or number of moons using the dropdown menu. The table data should be stored in an array of objects in the controller.

**Solution:**

<!DOCTYPE html>

<html ng-app="planetApp">

<head>

<meta charset="UTF-8">

<title>Planets in the Solar System</title>

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular.min.js"></script>

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

</head>

<body ng-controller="planetController">

<div class="container">

<h1>Planets in the Solar System</h1>

<div class="row">

<div class="col-md-3">

<input type="text" ng-model="searchTerm" class="form-control" placeholder="Search Planets...">

</div>

<div class="col-md-3">

<select class="form-control" ng-model="sortBy" ng-init="sortBy='name'">

<option value="name">Name</option>

<option value="type">Type</option>

<option value="distance">Distance</option>

<option value="moons">Number of Moons</option>

</select>

</div>

</div>

<table class="table table-striped table-hover">

<thead>

<tr>

<th>Name</th>

<th>Type</th>

<th>Distance (AU)</th>

<th>Number of Moons</th>

</tr>

</thead>

<tbody>

<tr ng-repeat="planet in planets | filter:searchTerm | orderBy:sortBy">

<td>{{ planet.name }}</td>

<td>{{ planet.type }}</td>

<td>{{ planet.distance }}</td>

<td>{{ planet.moons }}</td>

</tr>

</tbody>

</table>

</div>

</body>

</html>

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Code:app.js

angular.module('planetApp', [])

.controller('planetController', function($scope) {

$scope.planets = [

{ name: 'Mercury', type: 'Terrestrial', distance: 0.39, moons: 0 },

{ name: 'Venus', type: 'Terrestrial', distance: 0.72, moons: 0 },

{ name: 'Earth', type: 'Terrestrial', distance: 1.00, moons: 1 },

{ name: 'Mars', type: 'Terrestrial', distance: 1.52, moons: 2 },

{ name: 'Jupiter', type: 'Gas Giant', distance: 5.20, moons: 79 },

{ name: 'Saturn', type: 'Gas Giant', distance: 9.58, moons: 82 },

{ name: 'Uranus', type: 'Ice Giant', distance: 19.18, moons: 27 },

{ name: 'Neptune', type: 'Ice Giant', distance: 30.07, moons: 14 }

];

});

Output:

