

# Web Technologies Module 5,6 Assignment 4

## Atman Shastri, FYMCA-C, 182

### 1. Aim:

Write a program to demonstrate Angular JS Number and String Expression.

Theory:

Using Expressions “{{ }}” to demonstrate Numbers & String in angular

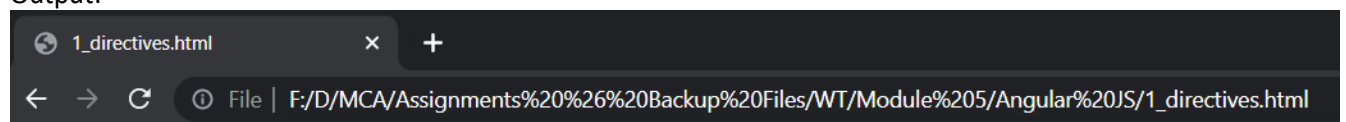
Code:

```
<html>
<head>
    <title> 1_directives.html</title>

</head>

<body>
    <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
    <div ng-app="" ng-init="age=16;price=10;quantity=5">
        <p>Name: <input type="text" ng-model="name"/></p>
        <p ng-bind="name"></p>
        <p>{{ "Age = " + age }}</p>
        <p>{{ "5+5 = " + 5+5 }}</p>
        <p>{{ "Total = " + price * quantity }}</p>
    </div>
</body>
</html>
```

Output:



Name:

Atman Shastri, 182

Age = 16

5+5 = 55

Total = 50

2. Aim:

Write a program to insert the user name in the textbox and greet the user with a welcome message on the same page.

Theory: To show the dynamic nature of Angular

Code:

```
<html>
<head>
    <title> Q2.html</title>

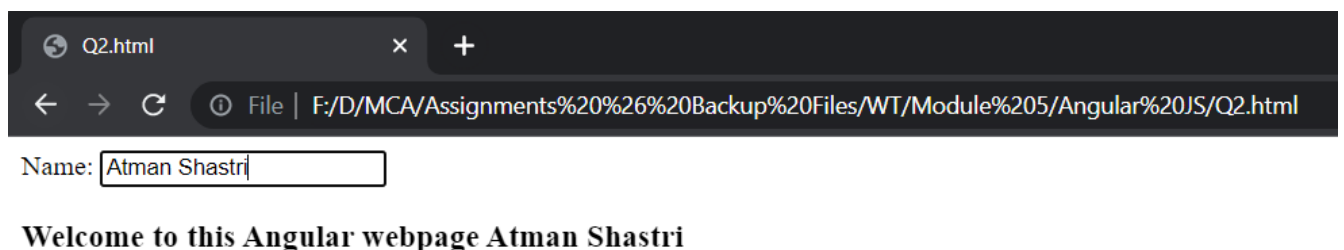
</head>

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

    <p>Name: <input type="text" ng-model="name"/></p>
    <h3>{{ "Welcome to this Angular webpage " + name }}</h3>

</body>
</html>
```

Output:



3. Aim:

Write a program to create an array of your favourite food items and display it in list

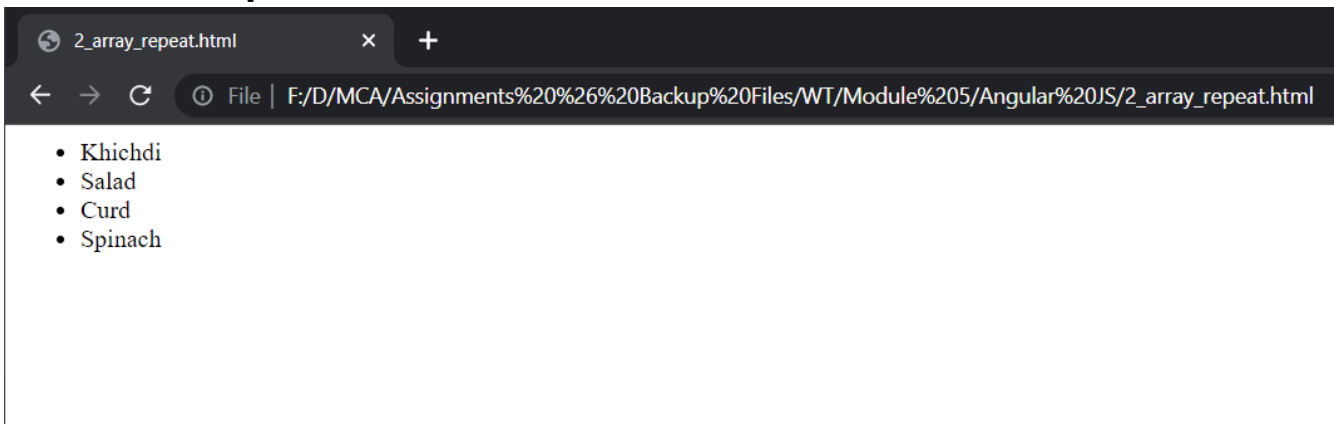
Theory:

To understand the use of ng-repeat directive

Code:

```
<html>
  <head>      </head>
  <body>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"></script>
    <div ng-app="" ng-init="names=['Khichdi','Salad','Curd','Spinach']">
      <ul>
        <li ng-repeat="x in names">
          {{x}}
        </li>
      </ul>
    </div>
  </body>
</html>
```

## Output:



4. Aim:

Write a program to display a list of terms and conditions after checking “Yes I Agree” it will enable “Install” Button.

Theory:

To understand the use of ng-if directive

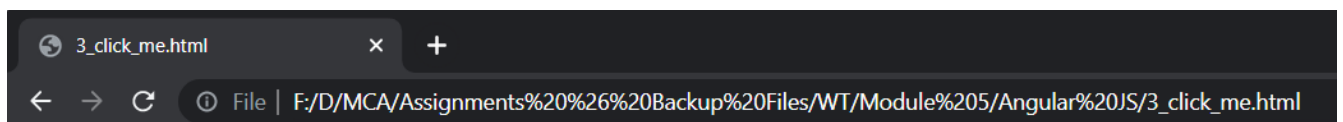
Code:

```
<html>
  <head></head>
  <body>
    <script
src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
    <body ng-app>
      <h1>Terms and policies</h1>
      <ol>
        <li>You will click the I agree button</li>
        <li>You will be there for sure</li>
        <li>You will listen carefully</li>
      </ol>
      Click me: <input type="checkbox" ng-model="checked"></checkbox>
      <input type="submit" value="install" ng-if="checked"/>

    </body>

</html>
```

## Output:



## Terms and policies

1. You will click the I agree button
2. You will be there for sure
3. You will listen carefully

Click me: ☒

5. Aim:

Write a program to accept the values from the user to calculate simple interest by clicking on a button it will display an answer.

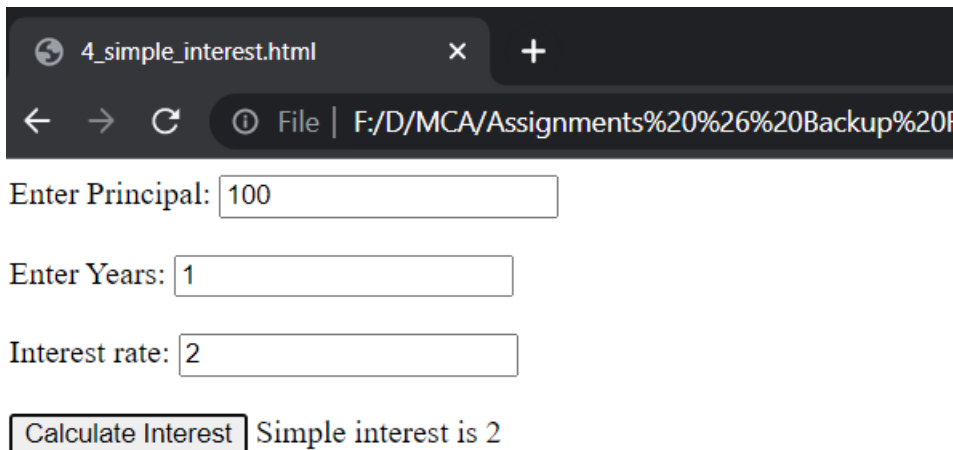
Theory:

To understand the use of ng-click directive

Code:

```
<html>
  <head></head>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <body ng-app>
    Enter Principal: <input type="number" ng-model="principal">
    <br><br>
    Enter Years: <input type="number" ng-model="years">
    <br><br>
    Interest rate: <input type="number" ng-model="rate">
    <br><br>
    <input type="submit" value="Calculate Interest"
ng-click="si=(principal*years*rate)/100">
    {{ "Simple interest is " + si }}
  </body>
</html>
```

## Output:



The screenshot shows a web browser window with the title "4\_simple\_interest.html". The address bar shows the file path "F:/D/MCA/Assignments%20%26%20Backup%20F". The page content displays three input fields for "Enter Principal:", "Enter Years:", and "Interest rate:". The values entered are 100, 1, and 2 respectively. Below these fields is a button labeled "Calculate Interest". To the right of the button, the text "Simple interest is 2" is displayed.

6. Aim:

Write a program to demonstrate module and controller.

Theory:

To learn how to create application and controller in script tag in order add functionality directly in HTML in angular js

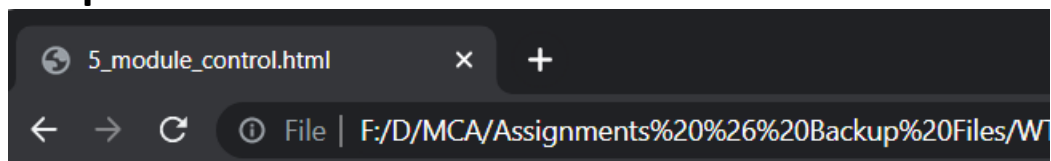
Code:

```
<html>
  <head></head>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <body ng-app="myapp" ng-controller="myctrl">
    {{ "First Name: " + firstname }}
    <br><br>{{ "Last Name: " + lastname }}

  </body>
</script>
  var app= angular.module("myapp",[])
  app.controller("myctrl",function($scope){
    $scope.firstname = "Sandhya";
    $scope.lastname = "Santosh";

  });
</script>
</html>
```

## Output:



First Name: Sandhya

Last Name: Santosh

7. Aim:

Write a program to create Employee object in the controller and also create properties like name, address and salary.

Theory:

To learn how to create and use a collection of objects within a controller and how to write it in an expression in angular js as well

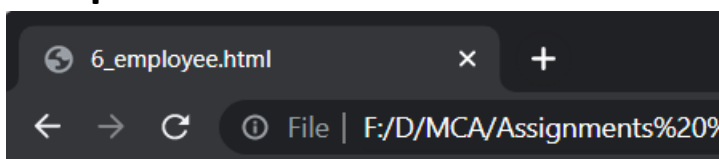
Code:

```
<html>
  <head></head>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <body ng-app="myapp" ng-controller="myctrl">
    <div ng-repeat="emp in Employee">
      <p>Name: {{emp.Name}}</p>
      <p>Address: {{emp.Address}}</p>
      <p>Salary: {{emp.Salary}}</p>

    </div>

  </body>
  <script>
    var app=angular.module("myapp",[])
    app.controller("myctrl",function($scope){
      $scope.Employee=[{Name:"Rakesh",Address:"Mulund",Salary:100},
        {Name:"Sandhya",Address:"Kandivali",Salary:450},
        {Name:"Souleh", Address:"Malad",Salary:350}
      ]
    });
  </script>
</html>
```

## Output:



Name: Rakesh

Address: Mulund

Salary: 100

Name: Sandhya

Address: Kandivali

Salary: 450

Name: Souleh

Address: Malad

Salary: 350

8. Aim:

Write a program to enter Book Details like Book Name (Use Uppercase only), Price (In Rupees), Current Date (in YYYY/MM/DD) use different filters and print data on click event.

Theory:

To learn about filters in angular js as well the "new Date()" in built method in angular js

Code:

```
<html>
  <head></head>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <body ng-app="myapp" ng-controller="myctrl">
    Enter Name: <input type="text" ng-model="name">
    Enter Amount: <input type="text" ng-model="amount">
    <input type="submit" value="show" ng-click="data()">
    <br><br>   Name: {{ n | uppercase }}
    <br><br>   Amount: {{ amt | currency:"₹ ":4 }}
    <br><br>   Date: {{ date | date: "yyyy/MM/dd" }}
  </body>
  <script>
    var app= angular.module("myapp",[]);
    app.controller("myctrl",function($scope){
      $scope.data = function(){
        $scope.n=$scope.name;
        $scope.amt=$scope.amount;
        $scope.date= new Date();
      }
    });
  </script>
</html>
```

## Output:

Enter Name:  Enter Amount:

Name: ATMAN

Amount: ₹ 10,000.0000

Date: 2023/02/16



9. Aim:

Write a program to generate an array of your favourite cars and also provide searching functionality.

Theory:

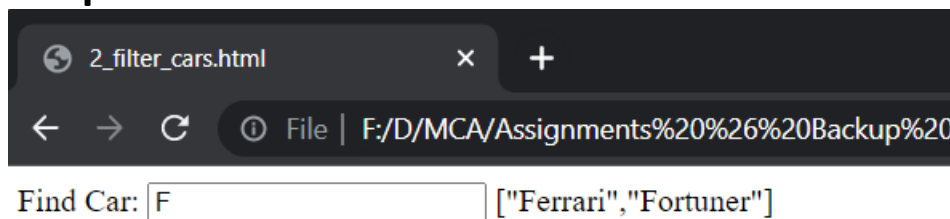
To learn about the filter filter which is used to select and return a subset of collection of items matching the comparator or an expression itself in the angular js code

Code:

```
<html>
  <title></title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <body ng-app="myapp" ng-controller="myctrl">
    Find Car: <input type="text" ng-model="search">
    {{cars|filter:search}}
  </body>
  <script>
    var app = angular.module("myapp",[]).controller("myctrl",function($scope){
      $scope.cars=["Ferrari","Fortuner","Maruti Suzuki"]

    });
  </script>
</html>
```

## Output:



10. Aim:

Write a program to generate student object which will hold at least 5 student data (Id, Name). Display all the data in tabular format and also provide ascending sort facility in column header.

Theory:

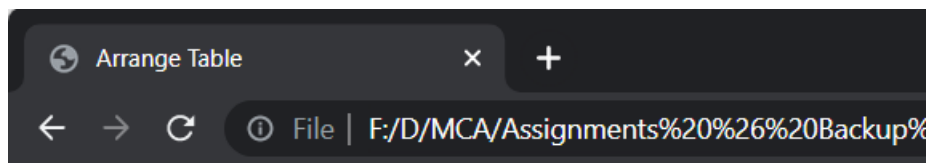
To create a function in app controller as well use the filter 'orderBy' in combination with ng-repeat and ng-click in order to sort columns ascending order based on click on the column headers

Code:

```
<html>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <title>Arrange Table</title>
  <body ng-app="myapp" ng-controller="myctrl">
    <table border="4">
      <tr>
        <th ng-click="orderBy('Name')">Name</th>
        <th ng-click="orderBy('rollno')">Roll No</th>
      </tr>

      <tr ng-repeat="s in students | orderBy:orderbyme ">
        <td>{{s.Name}}</td>
        <td>{{s.rollno}}</td>
      </tr>
    </table>
  </body>
  <script>
    angular.module("myapp", []).controller("myctrl",function($scope){
      $scope.students = [{Name:"Sandhya",rollno:100},
        {Name:"Ayesha",rollno:15},
        {Name:"Rita",rollno:31},
        {Name:"Seema",rollno:41},
        {Name:"Mahima",rollno:101},
        {Name:"Sana",rollno:151},
        {Name:"Reema",rollno:110},
        {Name:"Ayushi",rollno:1}];
      $scope.orderby=function(x){
        $scope.orderbyme=x;
      }
    });
  </script>
</html>
```

## Output:



Name	Roll No
Ayushi	1
Ayesha	15
Rita	31
Seema	41
Sandhya	100
Mahima	101
Reema	110
Sana	151

11. Aim:

Write a program to demonstrate mouse events in angular.js

Theory:

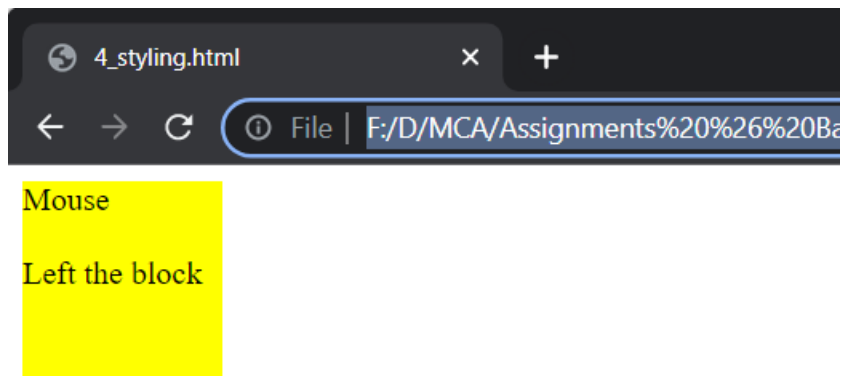
To simulate mouse events and change color of a div using ng-mouseenter and ng-mouseleave

Code:

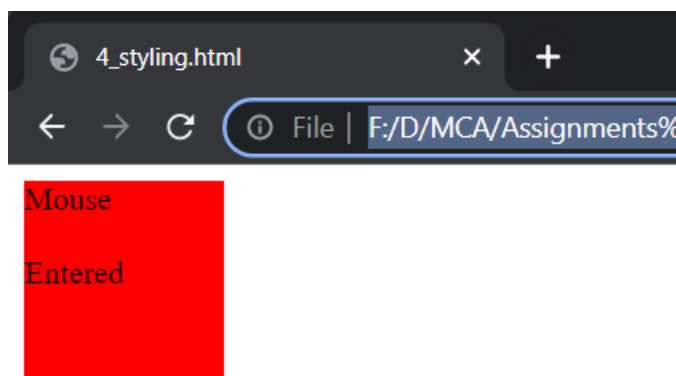
```
<html>
  <title></title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <head>
    <style>
      .redblock{
        height: 100px;
        width: 100px;
        background-color: red;
      }
      .yellowblock{
        height: 100px;
        width: 100px;
        background-color: yellow;
      }
    </style>
  </head>
  <body ng-app>

    <div ng-class="{redblock:enter,yellowblock:exit}"
ng-mouseenter="enter=true;exit=false"
ng-mouseleave="enter=false;exit=true">
      Mouse<span ng-show="enter">
        <br><br>
        Entered</span>
        <br><br>
        <span ng-show="exit">Left the block</span>
    </div>
    <br><br>
    <button type="button">Click Me!</button>
    </br><br>
  </body>
</html>
```

## Output:



Click Me!



Click Me!

12. Aim:

Write a program to select any one subject from the drop-down list and display the content of the selected subject (use switch directive)

Theory:

To learn and use ng-switch and ng-switch-when along with the option tag in html

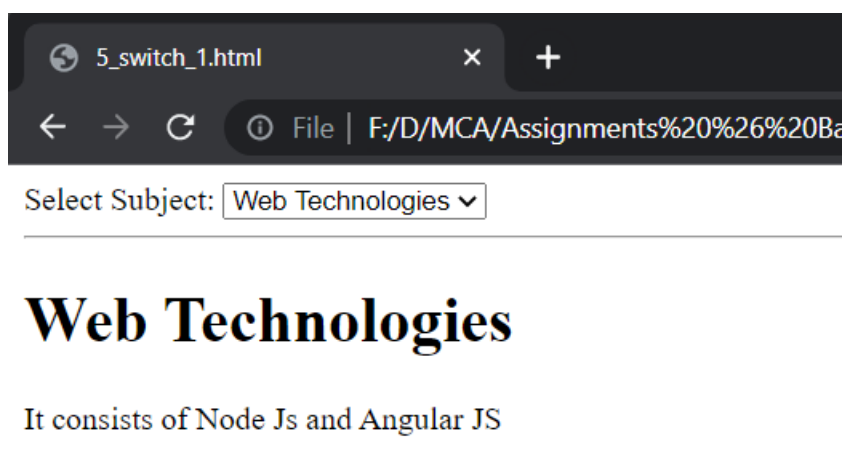
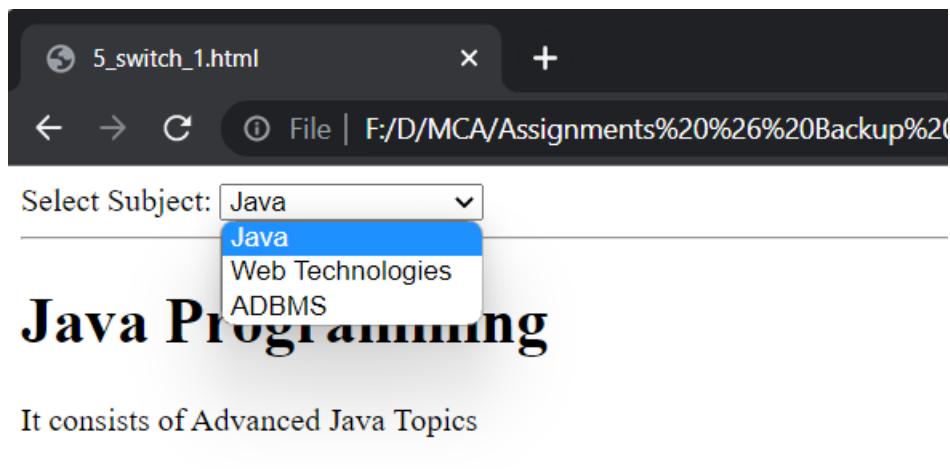
Code:

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

<head></head>

<body ng-app>
  <form>
    Select Subject:
    <select ng-model="subject">
      <option value=""> Java </option>
      <option value="wt"> Web Technologies </option>
      <option value="adms"> ADBMS </option>
      <!-- <option value="ai"> Artificial Intelligence </option> -->
    </select>
    <hr>
    <div ng-switch="subject">
      <div ng-switch-default>
        <h1>Java Programming</h1>
        <p>It consists of Advanced Java Topics</p>
      </div>
      <div ng-switch-when="wt">
        <h1>Web Technologies</h1>
        <p>It consists of Node Js and Angular JS</p>
      </div>
      <div ng-switch-when="adms">
        <h1>ADBMS</h1>
        <p>It consists of Data Warehousing and Management</p>
      </div>
    </div>
    <hr>
  </form>
</body>
</html>
```

## Output:



### 13. Aim:

Write a program to type text in a textbox provide the functionality of bold, italic and underline and also display color options in dropdown list

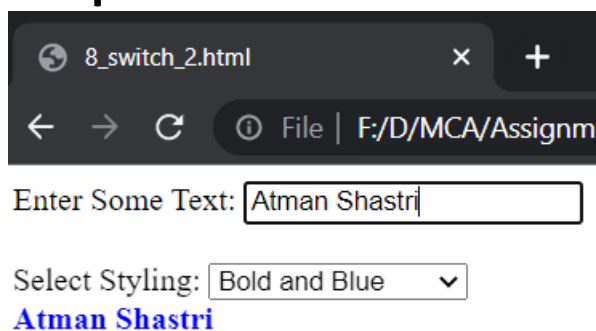
Theory:

To learn the use of bold, underline and italics html tags "b","i","u", and using ng-switch in combination of style html attribute

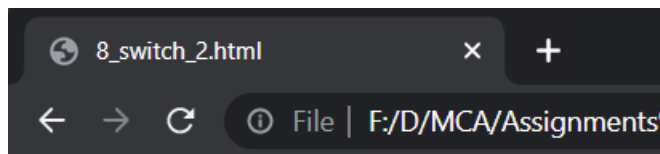
Code:

```
<html>
<title></title>
<script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
<head></head>
<body ng-app>
  <form >
    Enter Some Text: <input type="text" ng-model="data">
    <br><br>
    Select Styling:
    <select ng-model="styling">
      <option value=""> Bold and Blue </option>
      <option value="i"> Italic and Green </option>
      <option value="u"> Underline and red </option>
    </select>
    <div ng-switch="styling">
      <b ng-switch-default style="color:blue" >
        {{data}}</b>
      <i ng-switch-when="i" style="color:green">
        {{data}}</i>
      <u ng-switch-when="u" style="color:red">
        {{data}}</u>
    </div>
  </form>
</body>
</html>
```

### Output:



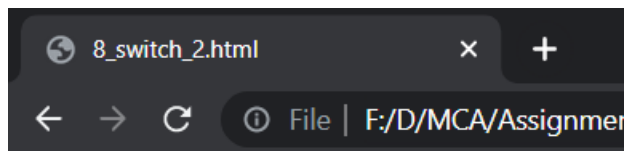




Enter Some Text:

Select Styling:

*Atman Shastri*



Enter Some Text:

Select Styling:

Atman Shastri

14. Aim:

Write a program to demonstrate how many characters are entered in the textbox. (use ng-keypress)

Theory:

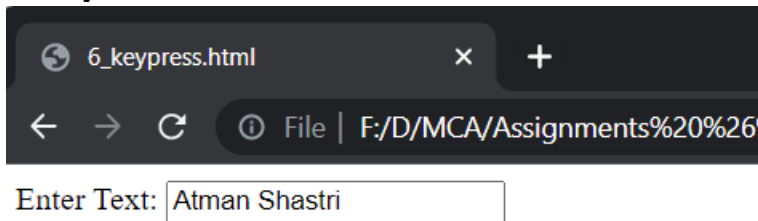
To learn and use keyboard events, ng-keypress directive to log the number of keypresses and update it dynamically on the webpage

Code:

```
<html>
  <title></title>
  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.8.2/angular.min.js"
type="text/javascript"> </script>
  <head></head>
  <body ng-app>
    Enter Text: <input type="text" ng-keypress="count=count+1" ng-init="count=0">
    <h1>Key Presses: {{count}} times</h1>

  </body>
</html>
```

## Output:



**Key Presses: 13 times**