ADVANCED WEB PROGRAMMING JOURNAL

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Department of Computer Science

CERTIFICATE

*This is to certified that the experimental work as entered in this journal is as per syllabus in **B.Sc Computer Science** for ADVANCED WEB-PROGRAMMING was done in the Computer Science laboratory of K.J. Somaiya College of Science & Commerce by the student Sis Dhanashree Ankush Mhapralkar having Seat No.- 2109820 of class **T.Y.B.Sc Computer Science** Semester V during the academic year 2020-2021. No. of Experiments completed 13 out of 13 .*

Sign of Subject In-charge
Date:

Course Coordinator of CS Department   **College seal**   **Sign of Examiner**

Date: *Date:*

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PRACTICAL – 1

1. Write a program in angular js to initialize the number and calculate the cube of the number
2. Write a program in angular js to initialize the array with object . The Object consist of venue and country . Display All the value of the array in the unordered list .
3. Write a program in angular js to accept first name from user and display welcome username using ng-bind.
4. Demonstrate the use of ng-show and ng-hide directive
5. Write a program in angular js to display table of sports with the column sports name , total number of like and total number of dislike and like and dislike button on click of like button its should increment the number of like or dislike. Initialize the table data in js file.

PRACTICAL – 2
1. Write an angularjs script for addition of two numbers using ng-init,ng-mode and ng-bind. and also demonstrate ng-show,ng-disabled,ng-click directives on button component.
2. Write a program in angular js to accept first name, salary per day and total number of working days , display first name with upper case filter and the total salary(salary per day*total no. of working days) use currency filter (don't use ng-click).
3. Write a program in angular js to display the programming language in the ascending order and descending order using filter . initialize the data in js file.

PRACTICAL – 3
1. Using angularjs display the student details who are live in pune in table format (using ng-repeat directive ,use array to store data , use filter)
   $scope.stud = [
   { name: 'Amit', city: 'pune' },
   { name: 'Sumit', city: 'pune' },

```
{ name: 'Rahul', city: 'mumbai' },
{ name: 'sachin', city: 'mumbai' },
];
```

2. Write a program in angular js to display 5 student details in table format.(using ngrepeat)

PRACTICAL – 4

1. Write a program in angular js to display table with the column name id , title, author and price . initialize the table data in js file . Create a dropdown menu with the option any, Id , title, author and price and a serach input box . on selection of the dropdown and value entered in the input search box it should display the data into the table.
2. Write a program in anularjs to initialize the data of employee(id,name,and salary) atleast 5 records. and use limit to filter to display first 3 record
3. Demonstration of limit to filter using string and array
4. Write a program in angularjs to initialize the data of employee.create custom filter to display record of emp whoese salary >5000.

PRACTICAL – 5

1. Write a program in angular js to Use of ng-src. Create a food Menu List using ng-src. Create table which display food image, Menu Name and price. Display atleast 5 Menu
   10-08-2021
2. https://picsum.photos/ write a program in angular js to display random images on every single click of images.
3. Use of ng-include. Create html file for asking user to enter id and name. Create table for input field and displaying value. Initialize the value for ID and name. in third row Display the same. Create another file index.html , use nginclude to include table file in index.html. Also initialize the value from controller (id and name).

PRACTICAL – 6

1. Write a program in angularjs to create custom service to calculate area of circle and circumference of circle.
2. Write a program in angular js to accept customer name,mobile number,product item,quantity as well as price and on click of display button display total amount.

PRACTICAL – 7

1. Write a program in angularjs Use of router. Create following page Technical Language

   • Home Page (Display institute name and list of languagE. Example: java, html, php (atleast 3))

   • Html Page (Display some information or image)

   • Same for other two pages.

PRACTICAL – 8

1. Write angularjs spa to accept voter details and check proper validation for name and age . name should be uppercase ,age should not be less than 18 years .
2. Write a program in angular js to accept user details and check proper validation for name, contact number and email. Validate it and after checking the terms and conditions onClick of submit but display form submitted.

PRACTICAL – 9

1. Write a program on reactjs to display atleast give Netflix series name in the form of unordered list.
2. Write a program in ReactJS to get current Hours and display Greeting Message. Example◊if 1 to 12 –Good Morning,12 to 4 Good Afternoon,4 to 12 good Evening.

PRACTICAL – 10

1. Write a program in react js to create a Simple Web App for institute.) use functional component .(NOTE:Create separate file for heading and displaying list and apply CSS)
20-09-2021
2. Write a program in react js to create a class component for product. Create and display Information such as product name,product image and price. (Display atleast 5 product).

PRACTICAL – 11

1. Write a program in react js to Given a stateless functional component, add state to it.Display Message{ You are currently logged In/Out} use if else and state
2. Write a program in reactjs create react app to display number is odd or even on every single click of button using useState(Hook)

PRACTICAL – 12

1. Write a program in react js Program to demonstrate the use of arrays as a state variable (using useState()).(display cube of number on every single click).

PRACTICAL – 13

1. Write a program in reactjs to demonstrate react form using hook.

PRACTICAL – 1

1. Write a program in angular js to initialize the number and calculate the cube of the number.
   - **Code:**

```
<!--- Dhanashree -2109820-->
<html><script src="angular.min.js"></script>
<head>Calculate cube of number</head>
<body ng-app>
        <div  ng-init="a=4">
        Cube of number {{a}} is {{a*a*a}}</div>
</body>
</html>
```

   - **Output:**

Calculate cube of number
Cube of number 4 is 64

2. Write a program in angular js to initialize the array with object . The Object consist of venue and country . Display All the value of the array in the unordered list .
   - **Code:**

```
<!--- Dhanashree -2109820-->
<!DOCTYPE html>
<html >
<head>
<title>Expression</title>
<script src="angular.min.js"></script>
</head>
<body  ng-app="" ng-
init="event=[{'Venue':'LA','Country':'USA'},{'Venue':'Mumbai','Country':'India
'},{'Venue':'Toronto','Country':'Canada'}]" >
<div >
    <ul>
        <li ng-repeat="a in event">
            {{a}}
        </li>
    </ul>
</div>
```

```
</html>
```

- **Output:**

- {"Venue":"LA","Country":"USA"}
- {"Venue":"Mumbai","Country":"India"}
- {"Venue":"Toronto","Country":"Canada"}

3. Write a program in angular js to accept first name from user and display welcome username using ng-bind.
   - **Code:**

```html
<!--- Dhanashree -2109820-->
<html>
    <head>
    <script src="angular.min.js"></script>
    </head>
    <body ng-app="">
        Enter Name: <input type="text" ng-model="fname" ></br>
        Welcome <span style="color:blue"> <B ng-
bind="fname"></B> </span><Br>
    </body>
</html>
```

- **Output:**

Enter Name: Dhanashree

Welcome **Dhanashree**

4. Demonstrate the use of ng-show and ng-hide directive
   - **Code:**

```html
<!--- Dhanashree -2109820-->
<!DOCTYPE html>
<html ng-app>
<head>
<script src="angular.min.js"></script>
</head>
<body>
        Show HTML: <input type="checkbox" ng-model="myvar">
<div ng-show="myvar">
<h1>Welcome</h1>
```

```
<p>You can see me, Have a nice day</p>
</div>
Hide HTML: <input type="checkbox" ng-model="variable">
<div ng-hide="variable">
<h1>Welcome</h1>
<p>click on show</p>
</div>
</body>
</html>
```

- **Output:**
➢ Main page

Show HTML: ☐ Hide HTML: ☐

Welcome

click on show

➢ Click on Show HTML

Show HTML: ☑

Welcome

You can see me, Have a nice day

Hide HTML: ☐

Welcome

click on show

➢ Click on Hide HTML

Show HTML: ☑

Welcome

You can see me, Have a nice day

Hide HTML: ☑   .

5. Write a program in angular js to display table of sports with the column sports name , total number of like and total number of dislike and like and dislike button on click of like button its should increment the number of like or dislike. Initialize the table data in js file

Code:

```
<!--- Dhanashree -2109820-->
<html>
<head>
<script src="angular.min.js" ></script>
</head>
  <body ng-app="myapp" ng-controller="myctrl">
<table align="center" border=1>
<tr>
<td> Name </td>
<td> Like </td>
<td> Dislike </td>
<td> Like </td>
<td> Dislike </td>
</tr>
<tr ng-repeat="sport in sports">
<td> {{sport.name}} </td>
<td> {{sport.likes}} </td>
<td> {{sport.dislikes}} </td>
<td><input type="button" value="like" ng-click=like(sport)></td>
<td><input type="button" value="dislike" ng-click=dislike(sport)></td>
</tr>
</table>
<script>
angular.module("myapp",[]).controller("myctrl",function($scope){
$scope.sports=[
{"name":"Hockey","likes":0,"dislikes":0},
```

```
{"name":"BAsketball","likes":0,"dislikes":0},
{"name":"Football","likes":0,"dislikes":0},
{"name":"Cricket","likes":0,"dislikes":0},]
$scope.like=function(sportname){
sportname.likes++;}
$scope.dislike=function(sportname){
sportname.dislikes++;}
})
</script>
</body>
```

Output:

Name	Like	Dislike	Like	Dislike
Hockey	3	0	like	dislike
BAsketball	1	3	like	dislike
Football	6	1	like	dislike
Cricket	2	1	like	dislike

***

PRACTICAL – 2

1. Write an angularjs script for addition of two numbers using ng-init,ng-mode and ng-bind. and also demonstrate ng-show,ng-disabled,ng-click directives on button component.
   - **Code:**

```html
<!--- Dhanashree -2109820-->
<!DOCTYPE html>
<html>
    <head>
        <title> ng-bind and ng-model directive </title>
        <script src="angular.min.js"> </script>
        <style>
        body
        {
            background-color: pink;
        }
        </style>
    </head>
<body ng-app="myApp" ng-controller="myCtrl">
    <h2><b><font color="blue">ng-model Directive</b></font></h2>
    <div ng-app="myApp" ng-controller="myCtrl">
        Number 1: <input type="number" ng-model="a" ng-init="a=20">
        Number 2: <input type="number" ng-model="b" ng-init="b=30">
        Result: {{a+b}}
    </div><br> <br>
    <h2><b><font color="blue">ng-bind Directive</b></font></h2>
    <div ng-app="myApp" ng-controller="myCtrl">
        Number 1: <input type="number" ng-model="c" ng-init="c=1">
        Number 2: <input type="number" ng-model="d" ng-init="d=2">
        <b>Addition=:</b> <span ng-bind="result1"></span>
    <br><br>
    <div ng-app="myApp" ng-init="myButton=true">
        <button ng-disabled="myButton" ng-click="add(c,d)">Click me</button>
        <br/><br/>
        <input type="checkbox" ng-model="myButton"/>Button<br/>
        <br/>
        Disabled : {{myButton}}
    </div>
    </div>
    <div ng-app="myApp" ng-controller="myCtrl">
        <input type="button" value="Show Angular" ng-click="ShowHide()"/>
        <br/><br/><div ng-show="IsVisible">Welcome to my Channel</div>
    </div>
</body>
```

```
<script>
    var app=angular.module('myApp',[]);
    app.controller('myCtrl',function($scope)
    {
        $scope.c=1;
        $scope.d=1;
        $scope.add=function(c,d){
            $scope.result1=($scope.c + $scope.d);
        }
        $scope.IsVisible=false;
        $scope.ShowHide = function()
        {
            $scope.IsVisible=true;
        }
    });
</script>
</html>
```

- **Output:**
➢ Button Disabled true:

ng-model Directive

Number 1: 25   Number 2: 30   Result: 55

ng-bind Directive

Number 1: 0   Number 2: 0   **Addition=: 9**

Click me

☑ Button

Disabled : true

Show Angular

Welcome to my Channel

➢ Button Disabled false:

ng-model Directive

Number 1: [25]   Number 2: [30]   Result: 55

ng-bind Directive

Number 1: [8]   Number 2: [10]   **Addition=:** 18

[Click me]

☐ Button

Disabled : false
[Show Angular]

Welcome to my Channel

2. Write a program in angular js to accept first name, salary per day and total number of working days , display first name with upper case filter and the total salary(salary per day*total no. of working days) use currency filter (don't use ng-click)
   • **Code:**

```
<!--- Dhanashree -2109820-->
<!DOCTYPE html>
<html>
    <head>
        <title> To Print name and Salary </title>
        <script src="angular.min.js"> </script>
    </head>
<body ng-app="myApp">
    <div ng-app="myApp" ng-controller="myController">
        Name: <input type="text" ng-model="name"><br/>
        Salary/Day : <input type="number" ng-model="sal"><br/>
        Number of Working Days: <input type="number" ng-
model="days"><br/><br/>
        <b>Name : {{name|uppercase}}<br/>
        Total Salary of {{name}} is : {{sal*days|currency:"$"}}</b>
    </div>
</body>
<script>
    var myApp=angular.module("myApp",[]);
```

```
    myApp.controller("myController",function($scope){
        $scope.sal=100;
    });
</script>
</html>
```

- **Output:**

Name: Dhanashree
Salary/Day : 1000000
Number of Working Days: 365

Name : DHANASHREE
Total Salary of Dhanashree is : $365,000,000.00

3. Write a program in angular js to display the programming language in the ascending order and descending order using filter. Initialize the data in js file.

- **Code:**

```html
<!--- Dhanashree -2109820-->
<!DOCTYPE html>
<html>
    <head>
        <title> ORDERBY ASCENDING AND DESCENDING ORDER </title>
        <script src="angular.min.js"> </script>
    </head>
<body ng-app="myApp">
    <script>
        angular.module('myApp',[]).controller('myCtrl',['$scope',function($
scope){
            $scope.data = [{tut: "HTML"},{tut:"JAVA"},{tut:"Android"},{tut:
"CSS"},{tut:"Angular JS"}]
        }]);
    </script>
    <div ng-app="myApp" ng-controller="myCtrl">
        <h2>Data in ASCENDING order</h2>
        <ul>
            <li ng-repeat="d in data |orderBy:'+tut'">
                {{d.tut}}
            </li>
        </ul>
```

```html
        <br/>
        <h2>Data in DESCENDING order</h2>
        <ul>
            <li ng-repeat="d in data |orderBy:'-tut'">
                {{d.tut}}
            </li>
        </ul>
        <br/>
    </div>
</body>
</html>
```

- **Output:**

Data in ASCENDING order

- Android
- Angular JS
- CSS
- HTML
- JAVA

Data in DESCENDING order

- JAVA
- HTML
- CSS
- Angular JS
- Android

***

PRACTICAL – 3

1. Write a program using angularjs display the student details who are live in pune in table format (using ng-repeat directive ,use array to store data , use filter)
   $scope.stud = [
   { name: 'Amit', city: 'pune' },
   { name: 'Sumit', city: 'pune' },
   { name: 'Rahul', city: 'mumbai' },
   { name: 'sachin', city: 'mumbai' },
   ];

   - **Code:**

```html
<!--- Dhanashree -2109820-->
<!DOCTYPE html>
<html>
    <head>
<script src="angular.min.js"></script>
<script>
var app=angular.module('myApp', []);
app.controller('myCtrl1',['$scope',function($scope){
    $scope.showdata=function(){
        $scope.stud=[
        { name: 'Amit', city: 'pune' },
        { name: 'Sumit', city: 'pune' },
        { name: 'Rahul', city: 'mumbai' },
        { name: 'sachin', city: 'mumbai' },
        ];
    };
}]);

app.controller('myCtrl2',['$scope',function($scope){
    $scope.showstud=function(){
        $scope.stud=[
        { name: 'Amit', city: 'pune' },
        { name: 'Sumit', city: 'pune' },
        { name: 'Rahul', city: 'mumbai' },
        { name: 'sachin', city: 'mumbai' },
        ];

    };
}]);

</script>
</head>
<body ng-app="myApp">
```

```
    <div ng-controller="myCtrl1">
<h2><center> List of students </center></h2>
<table align="center" border="1">
    <tr ng-repeat="x in stud">
        <td>{{x.name}}</td>
        <td>{{x.city}}</td>
    </tr>
    </table>
<center><input type="button" ng-
click="showdata()" value="Display all"/></center>

</div>
<div ng-controller="myCtrl2">
    <center><h2>List of Students living in pune</center></h2>
        <table align="center" border="3">
            <tr ng-repeat="x in stud|filter:'pune'">
                <td>{{x.name}}</td>
                <td>{{x.city}}</td>
            </tr>
        </table>
    <center><button ng-click="showstud()" >Click here</button></center>
</div>
</body>
</html>
```

- **Output:**

➢ Display all

List of students

Amit	pune
Sumit	pune
Rahul	mumbai
sachin	mumbai

Display all

List of Students living in pune

Click here

➢ Display students who live in Pune.

List of students

Amit	pune
Sumit	pune
Rahul	mumbai
sachin	mumbai

Display all

List of Students living in pune

Amit	pune
Sumit	pune

Click here

2. Write a program in angular js to display 5 student details in table format. (using ngrepeat)
   - **Code:**

```html
<!--- Dhanashree -2109820-->
<html>
    <head>
        <script src="angular.min.js"></script>
    </head>
    <body ng-app>
        <table align="center" border=2 ng-init="stud=[
        {name:'Dhanashree',roll:20},
        {name:'Vedika',roll:12},
        {name:'Pallavi',roll:28},
        {name:'Arpita',roll:18},
        {name:'Mahek',roll:5}]">
            <tr>
                <th>NAME</th>
                <th>ROLL</th>
            </tr>
            <tr ng-repeat="s in stud">
                <td>{{s.name}}</td>
                <td>{{s.roll}}</td>
            </tr>
        </table>
    </body>
</html>
```

   - **Output:**

NAME	ROLL
Dhanashree	20
Vedika	12
Pallavi	28
Arpita	18
Mahek	5

***

PRACTICAL – 4

1. Write a program in angular js to display table with the column name id , title, author and price . initialize the table data in js file . Create a dropdown menu with the option any, Id , title, author and price and a serach input box . on selection of the dropdown and value entered in the input search box it should display the data into the table.

- **Code:**

```html
<!--- Dhanashree -2109820-->
<html>
    <head>
        <script src="angular.min.js"></script>
        <style>
            body {padding-top: 30px;}
        </style>
    </head>
<body>
    <div  ng-app="bookApp" ng-controller="bookCtrl">
        <center>Search by:
        <select ng-model='SearchTerm'>
            <option value='$'>Any</option>
            <option value='id'>Book Id</option>
            <option value='title'>Book Title</option>
            <option value='author'>Author</option>
            <option value='price'>Price</option>
        </select>


        Search key:
        <input type="text" ng-model="searchkeyword[SearchTerm]">
        </center>
    <br/>
    <br>
    <center> <table border=2>
        <tr>
            <th>Book Id</th>
            <th>Book Title</th>
            <th>Author</th>
            <th>Price</th>
        </tr>
        <tr ng-repeat="book in booklist | filter:searchkeyword">
            <td>{{book.id}}</td>
            <td>{{book.title}}</td>
```

```
            <td>{{book.author}}</td>
            <td>{{book.price}}</td>
            </tr>
            </table></center>
            </div>
<script>
    var bookApp=angular.module("bookApp",[]);
    bookApp.controller('bookCtrl',function($scope){
        $scope.searchkeyword={}
        $scope.SearchTerm='$';
        $scope.booklist=[
            {"id":1,"title":"Hobbit","author":"Aman","price":700},
            {"id":2,"title":"The Devotion of suspect","author":"IShigami","
price":850},
            {"id":3,"title":"The girl in room 101","author":"Chetan Bhagat"
,"price":800},
            {"id":4,"title":"Who moved my cheese","author":"Dr Chandler","p
rice":500},
            {"id":5,"title":"Harry Potter","author":"Anuj","price":650}
        ];
    })

</script>
 </body>
 </html>
```

- **Output**

Search by: Any ▾ Search key: [   ]

Book Id	Book Title	Author	Price
1	Hobbit	Aman	700
2	The Devotion of suspect	IShigami	850
3	The girl in room 101	Chetan Bhagat	800
4	Who moved my cheese	Dr Chandler	500
5	Harry Potter	Anuj	650

➢ With book ID as 4

Search by: [Book Id ⌄] Search key: [4   ]

Book Id	Book Title	Author	Price
4	Who moved my cheese	Dr Chandler	500

➢ With author containing name with "Ch"

Search by: [Author ⌄] Search key: [Ch   ]

Book Id	Book Title	Author	Price
3	The girl in room 101	Chetan Bhagat	800
4	Who moved my cheese	Dr Chandler	500

➢ With book title containing "th"

Search by: [Book Title ⌄] Search key: [th   ]

Book Id	Book Title	Author	Price
2	The Devotion of suspect	IShigami	850
3	The girl in room 101	Chetan Bhagat	800

➢ With price containing "800rs"

Search by: [Price ⌄] Search key: [800   ]

Book Id	Book Title	Author	Price
3	The girl in room 101	Chetan Bhagat	800

2. Write a program in anularjs to initialize the data of employee (id,name,and salary) atleast 5 records. and use limit to filter to display first 3 record

- **Code:**

```html
<html>
    <head>
        <title>
            filter
        </title>
        <script src="angular.min.js"></script>
        <script src="employee.js"></script>
    </head>
    <body ng-app="myModule">

        <div ng-controller="mycontroller">
            Rows to display:<input type="number" step="1" min="-1" max="6" ng-model="rowlimit" />
            <br>
            <br>
            <table border=1>
                <tr>
                    <th>ID</th>
                    <th>Name</th>
                    <th>Salary</th>

                </tr>
                <tr ng-repeat="emp in employee | limitTo:rowlimit ">
                    <th>{{emp.id|uppercase}}</th>
                    <th>{{emp.name|uppercase}}</th>
                    <th>{{emp.salary|number:2}}</th>

                </tr>
            </table>
        </div>
    </body>
</html>
```

employee.js

```javascript
var app=angular.module("myModule",[]);
app.controller("mycontroller",function($scope){
    var employee=[
        {id:1,name:"ben",salary:55000.788},
        {id:2,name:"Sara",salary:50000},
        {id:3,name:"mark",salary:57000},
        {id:4,name:"pam",salary:4300},
        {id:5,name:"ben",salary:55000.788},
```

```
        {id:6,name:"Sara",salary:50000}
    ];
    $scope.employee=employee;
    $scope.rowlimit=3;
});
```

- **Output**

Rows to display: 6 ▲▼

ID	Name	Salary
1	BEN	55,000.79
2	SARA	50,000.00
3	MARK	57,000.00
4	PAM	4,300.00
5	BEN	55,000.79
6	SARA	50,000.00

➤ Rows to display as "3"

Rows to display: 3 ▲▼

ID	Name	Salary
1	BEN	55,000.79
2	SARA	50,000.00
3	MARK	57,000.00

3. Demonstration of limit to filter using string and array
   - **Code:**

```html
<!--- Dhanashree -2109820-->
<html>
    <head>
    <script src="angular.min.js"></script>
    </head>
<body ng-app="myApp">
        <h2>String Limit</h2>
        <div ng-controller="filterctrl">
```

```
              Filter on String {{str}}: {{str | limitTo : 4}}

        <h4>Dynamic string limit</h4>
        <p>Example string: <b>{{Char}}</b> <br />
            Limit characters to :
        <input type="number" ng-model="CharLimit" />
            => {{ Char | limitTo:CharLimit}}
        </p>

        <h4>Element Array limit</h4>
        <p>
            Example Array: <b>{{CharactersArray}}</b> <br />
            Limit array element to :
            <input type="number" ng-model="CharactersLimitA" />
            => {{ CharactersArray | limitTo:CharactersLimitA}}
        </p>
    </div>
    <script>
        var app = angular.module("myApp", []);
        app.controller("filterctrl", ["$scope", function($scope){
            $scope.str="AngularJs"

            $scope.Char = "this is an example of limit to filter in angular
 js" ;
            $scope.CharLimit = 10;

            $scope.CharactersArray = ['This','is ','an','example','of','lim
it','to','filter'];
            $scope.CharactersLimitA = 3;

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

- **Output**

String Limit

Filter on String AngularJs: Angu

Dynamic string limit

Example string: **this is an example of limit to filter in angular js**
Limit characters to : | 27 | => this is an example of limit

Element Array limit

Example Array: **["This","is ","an","example","of","limit","to","filter"]**
Limit array element to : | 4   ⬍ | => ["This","is ","an","example"]

4. Write a program in angularjs to initialize the data of employee.create custom filter to display record of emp whose salary >5000.

- **Code:**

```html
<!--- Dhanashree -2109820-->
<html>
    <head>
        <title>
            Filtering Using Custom Filter
        </title>
        <script src="angular.min.js"></script>
        <script src="employee.js"></script>
    </head>
    <script>
        app.filter("salFilter", function () {
            return function (x) {
                var out = [];
                angular.forEach(x,function(i){
                    if(i.salary>=5000){
                        out.push(i)
                    }
                });
                return out;
            }
        });
    </script>
</script>
```

```html
    <body ng-app="myModule">
        <h2> Filtering Using Custom Filter </h2>
        <div ng-controller="mycontroller">
            <table border=1>
                <tr>
                    <th>ID</th>
                    <th>Name</th>
                    <th>Salary</th>

                </tr>
                <tr ng-repeat="emp in employee | salFilter ">
                    <th>{{emp.id|uppercase}}</th>
                    <th>{{emp.name|uppercase}}</th>
                    <th>{{emp.salary}}</th>

                </tr>
            </table>
        </div>
    </body>
</html>
```

employee.js

```javascript
var app=angular.module("myModule",[]);
app.controller("mycontroller",function($scope){
    var employee=[
        {id:1,name:"ben",salary:55000.788},
        {id:2,name:"Sara",salary:50000},
        {id:3,name:"mark",salary:57000},
        {id:4,name:"pam",salary:4300},
        {id:5,name:"ben",salary:55000.788},
        {id:6,name:"Sara",salary:50000}
    ];
    $scope.employee=employee;
    $scope.rowlimit=3
```

- **Output**

Filtering Using Custom Filter

ID	Name	Salary
1	BEN	55000.788
2	SARA	50000
3	MARK	57000
5	BEN	55000.788
6	SARA	50000

***

PRACTICAL – 5

1. Write a program in angular js to Use of ng-src. Create a food
   Menu List using ng-src. Create table which display food image,
   Menu Name and price. Display atleast 5 Menu.
   - **Code:**

```html
<!--- Dhanashree -2109820-->
<!DOCTYPE html>
<html>
<head>
    <title>Welcome</title>
    <script src="angular.min.js"></script>
</head>
<body ng-app="myApp" ng-controller="myController">
    <div ng-controller="myController">

        <table border=1>
                <tr>
                        <th>Image</th>
                        <th>Name</th>
                        <th>Price</th>

                </tr>
                <tr ng-repeat="food in menu">
                        <td><img ng-
src="{{food.image}}" width="50" height="30" /></td>
                        <td>{{food.name}}</td>
                        <td>{{food.price}}</td>

                </tr>
        </table>
    </div>
    <script>
        var app = angular.module("myApp", []);
        app.controller('myController', ['$scope', function ($scope) {
            $scope.menu =
            [{image:"cheese.jpg",name:"Cheese Pizza",price:"$350" },
            {image:"p1.jpg",name:"Veg Pizza",price:"$400" },
            {image:"p2.jpg",name:"veg Paneer Pizza",price:"$450" },
            {image:"b1.jpg",name:"burger",price:"$199" },
            {image:"n1.jpg",name:"Noodles",price:"$299" }];
        }]);
    </script>
</body>
```

- **Output:**

Image	Name	Price
	Cheese Pizza	$350
	Veg Pizza	$400
	veg Paneer Pizza	$450
	burger	$199
	Noodles	$299

2. Write a program in angular js to display random images on every single click of images.
   - **Code:**

```html
<!DOCTYPE html>
<html>
    <head>
        <title> Click Imagee </title>
        <script src="angular.min.js"> </script>
    </head>
<body>
    <div ng-app="MyApp" ng-controller="MyCtrl">
        <img ng-src="{{Image.Photo}}" ng-
click="ImageClick()" style="height: 200px ;cursor: pointer" />
        <p> Click on the Image </p>
    </div>
</body>
<script type="text/javascript">
    var app=angular.module("MyApp",[]);
    app.controller("MyCtrl", function($scope){
        $scope.Images =[
            {Id:1, Photo: "https://picsum.photos/200/300"},
            {Id:2, Photo: "https://picsum.photos/seed/picsum/200/300"},
            {Id:3, Photo: "https://picsum.photos/200/300?grayscale"},
            {Id:4, Photo: "https://picsum.photos/200/300/?blur"},
```

```
            {Id:5, Photo: "https://picsum.photos/id/870/200/300?grayscale&blur
=2"},
        ];
        $scope.Image =$scope.Images[0];
        var index = 1;
        $scope.ImageClick = function(){
            $scope.Image=$scope.Images[index];
            index++;
            if (index > $scope.Images.length-1){
                index=0
            }
        };
    });
</script>
</html>
```

- **Output:**

Click on the Image

Click on the Image

3. Use of ng-include. Create html file for asking user to enter id and name. Create table for input field and displaying value. Initialize the value for ID and name. in third row Display the same. Create another file index.html , use nginclude to include table file in index.html. Also initialize the value from controller (id and name).

- **Code:**

prac5_3_details.html

```html
<!--Dhanashree-2109820-->
<!DOCTYPE html>
<html>
    <head>
        <title> Details </title>
        <script src="angular.min.js"> </script>
    </head>
    <body>
        <table border="1">
            <tr>
                <td>ID:</td>
                <td><input type="number" ng-model="id"></td>
            </tr>
            <tr>
                <td>Name:</td>
                <td><input type="text" ng-model="name"></td>
            </tr><br>
            <tr>
                <td>Details of the Employee:</td>
                <td> {{id+","+name}}</td>
            </tr>
        </table>
    </body>
</html>
```

prac5_3_emp.html

```html
<!--Dhanashree-2109820-->
<!DOCTYPE html>
<html>
    <head>
        <title> Details </title>
        <script src="angular.min.js"> </script>
    </head>
    <body>
        <div ng-app="empApp" ng-controller="empCtrl">
        <div ng-include="'prac5_3_details.html'"></div>
        </div>
        <script>
```

```
        var empApp=angular.module("empApp",[]);
        empApp.controller("empCtrl",function($scope){
            $scope.id=2109820;
            $scope.name="Dhanashree";
        });
    </script>
  </body>
</html>
```

- **Output:**

ID:	2109820
Name:	Dhanashree
Details of the Employee:	2109820,Dhanashree

***

PRACTICAL – 6

1. Write a program in angular js to create custom service to calculate area of circle and circumference of circle.
   - **Code:**

```html
<!---Dhanashree-2109820-->
<!DOCTYPE html>
<html lang="en">
<head>
    <script src="angular.min.js"></script>
</head>
<body>
    <div class="root" ng-app="myapp" ng-controller="circle_ctrl">
        <section>
            <label for="radius">Enter Radius: </label> <input type="number"
 id="radius" step="0.1" ng-model="rad">
            <button ng-click="area()">Area</button>
            <button ng-click="circumference()">Circumference</button>
            <p>{{ans}}</p>
        </section>
    </div>

    <script>
        myapp= angular.module("myapp", []);
        myapp.factory("Circle_fact", function(){
            var fact= {};
            fact.area= function(radius){
                let a= 3.14* radius* radius;
                return(a);
            }
        return(fact);
        });

        myapp.service("Circle_ser", function(){
            this.circumference= function(radius){
                let c= 2* 3.14*radius;
                return(c);
            }
        });

        myapp.controller("circle_ctrl", function($scope, Circle_fact, Circl
e_ser){
            $scope.rad= 1;
            $scope.ans= "";
            $scope.area= function(){
```

```
                $scope.ans= "Area of Circle = "+ Circle_fact.area($scope.ra
d);
            }

            $scope.circumference= function(){
                $scope.ans= "Circumference of Circle = "+ Circle_ser.circum
ference($scope.rad);
            }
        });
    </script>
</body>
</html>
```

- **Output:**

➢ Area:

Enter Radius: 4   [Area] [Circumference]

Area of Circle = 50.24

➢ Circumference:

Enter Radius: 5   [Area] [Circumference]

Circumference of Circle = 31.400000000000002

2. Write a program in angular js to accept customer name, mobile number, product item, quantity as well as price and on click of display button display total amount.
   - **Code:**

```
<!---Dhanashree-2109820-->
<html>
<head>
    <script src="angular.min.js"></script>
</head>
<h1 align="center"> Customer Invoice </h1>

<body ng-app="invoice">
    <div ng-app="invoice" ng-controller="invoiceCtrl">
        <table border=1>
```

```html
            <tr>
                <td>Name</td>
                <td>Contact No.</td>
                <td>Item</td>
                <td>Quantity</td>
                <td>Price</td>
                <td>Total Amount</td>
            </tr>
            <tbody>
                <tr>
                    <th><input type="text" ng-model="name" /></th>
                    <th><input type="number" ng-model="mobile" /></th>
                    <th>
                        <select name="details" ng-model="item">
                            <option value="Pencil">Pencil</option>
                            <option value="Book">Book</option>
                            <option value="Rubber">Rubber</option>
                            <option value="Mask">Mask</option>
                            <option value="Stepler">Stepler</option>
                        </select>
                    </th>
                    <th><input type="number" ng-model="quantity" /></th>
                    <th><input type="number" ng-model="price" /></th>
                    <th>{{total | currency}}</th>
                </tr>
            </tbody>
        </table>
        <br /><br />
        <center>
            <button type="button" ng-
click="Total(quantity,price)">Show Details</button>
            <h3>The total amount payable is {{total | currency}}</h3>
        </center>
    </div>
    <script>
        var app = angular.module("invoice", []);

        app.service("calculate", function () {
            var p = 0;
            this.total = function (quantity, price) {
                return quantity * price;
            };
        });
        app.controller("invoiceCtrl", function ($scope, calculate) {
            $scope.Total = function (quantity, price) {
                $scope.total = 0;
                $scope.total = calculate.total(quantity, price);
            };
```

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

</html>
```

- **Output:**
➢ Mask

Customer Invoice

Name	Contact No.	Item	Quantity	Price	Total Amount
Dhanashree	8652706755	Mask ⌄	3	50	**$150.00**

Show Details

The total amount payable is $150.00

➢ Rubber

Customer Invoice

Name	Contact No.	Item	Quantity	Price	Total Amount
Dhanashree	8652706755	Rubber ⌄	4	10	**$40.00**

Show Details

The total amount payable is $40.00

➢ Book

Customer Invoice

Name	Contact No.	Item	Quantity	Price	Total Amount
Dhanashree	8652706755	Book ⌄	2	100	**$200.00**

Show Details

The total amount payable is $200.00

***

PRACTICAL – 7

1. Write a program in angular js Use of router. Create following page Technical Language
   - Home Page(Display institute name and list of language Example: java, html, php(atleast 3))
   - Html Page(Display some information or image)
   - Same for other two pages.

   - **Code:**

```html
<!---Dhanashree-2109820-->
<html>
<head>
    <script src="angular.min.js"></script>
    <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.6.9/angular-route.js"></script>
</head>
<img src="somaiya.png" alt="Somaiya Vidyavihar">
<h1> INSTITUTE NAME: SOMAIYA </h1>
<H2> Programming Languages </H2>

<body ng-app="myApp">
    <a href="#/!">Main</a>
    <ul>
        <li><a href="#!java">Java</a></li>
        <li><a href="#!python">Python</a></li>
        <li><a href="#!angular">Angular Js</a></li>
    </ul>
    <div ng-view></div>
    <script>
        var app = angular.module("myApp", ["ngRoute"]);
        app.config(function ($routeProvider) {
            $routeProvider
                .when("/", {
                    template: "<h1>Click on any programming language below to know more</h1>",
                })
                .when("/java", {
                    templateUrl: "java.html",
                })
                .when("/python", {
                    templateUrl: "python.html",

                })
                .when("/angular", {
                    templateUrl: "angular.html",
```

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

</html>
```

➢ java.html

```html
<html>
    <imp src= "javalogo.jpg" alt="javal">
        <img src="javal.png" alt="java">
<p>Java is a high-level, class-based, object-
oriented programming language that is designed to have as few implementation d
ependencies as possible. It is a general-
purpose programming language intended to let application developers write once
, run anywhere (WORA),[17] meaning that compiled Java code can run on all plat
forms that support Java without the need for recompilation.</p>
</html>
```

➢ angular.html

```html
<html><p>AngularJS is a JavaScript framework. It can be added to an HTML page
with a tag.

    AngularJS extends HTML attributes with Directives, and binds data to HTML
with Expressions.

    AngularJS is a JavaScript Framework
    AngularJS is a JavaScript framework written in JavaScript.

    AngularJS is distributed as a JavaScript file, and can be added to a web p
age with a script tag:
    </p>
    </html>
```

➢ python.html

```html
<html>
    <img src="pythonlogo.png" alt="python">
    <p>Python is an interpreted high-level general-
purpose programming language. Its design philosophy emphasizes code readabilit
y with its use of significant indentation. Its language constructs as well as
its object-
oriented approach aim to help programmers write clear, logical code for small
and large-scale projects.[30]
        Python is dynamically-typed and garbage-
collected. It supports multiple programming paradigms, including structured (p
articularly, procedural), object-
```

```
oriented and functional programming. It is often described as a "batteries inc
luded" language due to its comprehensive standard library.[31]</p>
    </html>
```

- **Output:**
➢ Main

INSTITUTE NAME: SOMAIYA

Programming Languages

Main

- Java
- Python
- Angular Js

Click on any programming language below to know more

➢ Java

INSTITUTE NAME: SOMAIYA

Programming Languages

Main

- Java
- Python
- Angular Js

Java is a high-level, class-based, object-oriented programming language that is designed to have as few implementation dependencies as possible. It is a general-purpose programming language intended to let application developers write once, run anywhere (WORA),[17] meaning that compiled Java code can run on all platforms that support Java without the need for recompilation.

➢ Python

INSTITUTE NAME: SOMAIYA

Programming Languages

Main

- Java
- Python
- Angular Js

Python is an interpreted high-level general-purpose programming language. Its design philosophy emphasizes code readability with its use of significant indentation. Its language constructs as well as its object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects.[30] Python is dynamically-typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly, procedural), object-oriented and functional programming. It is often described as a "batteries included" language due to its comprehensive standard library.[31]

➢ AngularJs

INSTITUTE NAME: SOMAIYA

Programming Languages

Main

- Java
- Python
- Angular Js

AngularJS is a JavaScript framework. It can be added to an HTML page with a tag. AngularJS extends HTML attributes with Directives, and binds data to HTML with Expressions. AngularJS is a JavaScript Framework AngularJS is a JavaScript framework written in JavaScript. AngularJS is distributed as a JavaScript file, and can be added to a web page with a script tag:

***

PRACTICAL – 8

1. Write a program in angular js to accept voter details and check proper validation for name and age . name should be uppercase ,age should not be less than 18 years .
   - **Code:**

```html
<!---Dhanashree-2109820--->>
<!DOCTYPE html>
<html>
  <head>
    <title>Angular JS Forms</title>
    <script src="angular.min.js"></script>

    <style>
      table,
      th,
      td {
        border: 1px solid grey;
        padding: 5px;
      }
    </style>
  </head>
  <body>
    <h2 style="text-align: center; color: blue">Validation Details Form</h2>
    <div ng-app="mainApp" ng-controller="voterdetails">
      <form name="voter" novalidate>
        <table border="0" align="center">
          <tr>
            <td>Enter first name:</td>
            <td>
              <input
                name="Name"
                type="text"
                ng-model="Name"
                ng-pattern="/^[A-Z]*[A-Z]$/"
                required
              />
              <span
                style="color: red"
                ng-show="voter.Name.$dirty && voter.Name.$invalid"
              >
                <span ng-show="voter.Name.$error.required"
                  >Name is required.</span
                >
```

```html
            <span ng-show="voter.Name.$error.pattern"
              >Only capital characters are allowed</span
            >
          </span>
        </td>
      </tr>

      <tr>
        <td>Enter Age:</td>
        <td>
          <input
            name="age"
            type="number"
            ng-model="age"
            ng-pattern="/^(?:1[8-9]|[2-9][0-9])/"
            required
          />
          <span
            style="color: red"
            ng-show="voter.age.$dirty && voter.age.$invalid"
          >
            <span ng-
show="voter.age.$error.pattern||voter.age.$dirty"
              >Age should be more than 18.</span
            >
          </span>
        </td>
      </tr>
      <tr>
        <td>Enter Nationality:</td>
        <td>
          <input
            name="nationality"
            type="text"
            ng-model="nationality"
            required
          />
          <span
            style="color: red"
            ng-
show="voter.nationality.$dirty && voter.nationality.$invalid"
          >
            <span ng-show="voter.nationality.$error.required"
              >Nationality is required.</span
            >
          </span>
        </td>
      </tr>
```

```html
          <tr>
            <td>
              <button
                ng-disabled="(voter.Name.$required ||
              voter.Name.$invalid) || (voter.age.$required ||
              voter.age.$invalid) || (voter.nationality.$required ||
              voter.nationality.$invalid)"
                ng-click="Display()"
              >
                Voter Information
              </button>
            </td>
          </tr>
        </table>
      </form>
      <p style="font-style: bold; color:darkmagenta; text-
align: center"> Voter Validation Information</p>
      <div ng-show="IsVisible">
        <table align="center">
          <tr>
            <th>Name</th>
            <th>Age</th>
            <th>Nationality</th>
          </tr>
          <tr>
            <th>{{Name}}</th>
            <th>{{age}}</th>
            <th>{{nationality}}</th>
          </tr>
        </table>
      </div>
    </div>
    <script>
      var mainApp = angular.module("mainApp", []);
      mainApp.controller("voterdetails", function ($scope) {
        $scope.IsVisible = false;

        $scope.Display = function () {
          $scope.IsVisible = true;
        };
      });
    </script>
  </body>
</html>
```

- **Output:**

Validation Details Form

Enter first name:	dha	Only capital characters are allowed
Enter Age:	14	Age should be more than 18.
Enter Nationality:	Indian	
Voter Information		

Voter Validation Information

Validation Details Form

Enter first name:		Name is required.
Enter Age:	14	Age should be more than 18.
Enter Nationality:		Nationality is required.
Voter Information		

Voter Validation Information

Validation Details Form

Enter first name:	DHANASHREE
Enter Age:	20
Enter Nationality:	Indian
Voter Information	

Voter Validation Information

Name	Age	Nationality
DHANASHREE	20	Indian

2. Write a program in angular js to accept user details and check proper validation for name, contact number and email. Validate it and after checking the terms and conditions onClick of submit but display form submitted.

- **Code:**

```html
<!---Dhanashree-2109820-->
<!DOCTYPE html>
<html>

<head>
    <title>Validate 2</title>
    <script src="angular.min.js"></script>
</head>

<body>
    <h2>Validate User Details</h2>
    <div ng-app="mainApp" ng-controller="userDetails">
        <form name="userForm">
            Enter Name:
            <input name="Name" type="text" ng-model="Name" ng-pattern="/^[a-zA-Z]*[a-zA-Z]$/" required />
            <span style="color: red" ng-show="userForm.Name.$dirty && userForm.Name.$invalid">
                <span ng-show="userForm.Name.$error.required">Name is required.</span>
                <span ng-show="userForm.Name.$error.pattern">Only characters are allowed</span>
            </span>
            <br /><br />
            Enter Contact Number:
            <input name="contact" type="text" ng-model="contact" ng-pattern="/^[0-9]*$/" ng-maxlength="10" ng-minlength="10" required />
            <span style="color: red" ng-show="userForm.contact.$dirty && userForm.contact.$invalid">
                <span ng-show="userForm.contact.$error.required">Contact number is required.</span>
                <span ng-show="userForm.contact.$error.pattern||userForm.contact.$dirty">Only digits are allowed</span>
                <span ng-show="userForm.contact.$error.pattern.maxlength"></span>
                <span ng-show="userForm.contact.$error.pattern.minlength"></span>
            </span>
            <br /><br />
```
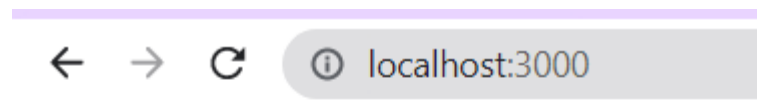
```html
          Enter Email:
          <input name="email" type="email" ng-
model="email" length="100"  required />
          <span style="color: red" ng-
show="userForm.email.$dirty && userForm.email.$invalid">
              <span ng-
show="userForm.email.$error.required">Email is required.</span>
              <span ng-
show="userForm.email.$error.email">Invalid email address.</span>
          </span>
          <br /><br />
          <input type="checkbox" ng-
model="selected" /> I Agree to the terms and
          Conditions.<br />
          <br />
          <button ng-disabled="(userForm.Name.$required ||
                    userForm.Name.$invalid) || (userForm.contact.$required
 ||
                    userForm.contact.$invalid) || (userForm.email.$require
d ||
                    userForm.email.$invalid) || !selected" ng-
click="Display()">
              Submit
          </button>
      </form>
      <div ng-show="IsVisible">
          Form submitted Successfully!
      </div>
      <script>
          var mainApp = angular.module("mainApp", []);
          mainApp.controller("userDetails", function ($scope) {
              $scope.IsVisible = false;

              $scope.Display = function () {
                  $scope.IsVisible = true;
              };

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

- **Output:**

Validate User Details

Enter Name: [   ] Name is required.

Enter Contact Number: [   ] Contact number is required. Only digits are allowed

Enter Email: [dhanu   ] Invalid email address.

☑ I Agree to the terms and Conditions.

[Submit]

Validate User Details

Enter Name: [DHANASHREE   ]

Enter Contact Number: [1234567891   ]

Enter Email: [dhanu@gmail.com   ]

☑ I Agree to the terms and Conditions.

[Submit]
Form submitted Successfully!

***

PRACTICAL – 9

1. Write a program in reactjs to display atleast give Netflix series name in the form of unordered list.

- **Code:**

```
1.  {/*Dhanashree 2109820*/}
2.  import React from 'react';
3.  import ReactDOM from 'react-dom';
4.  import App from './App';
5.  ReactDOM.render(
6.
7.      <>
8.      <h2>NETFLIX SERIES</h2>
9.      <ul>
10.       <li>girls hostel</li>
11.       <li>lucifer</li>
12.       <li>ray</li>
13.       <li>mismatched</li>
14.       <li>little things</li>
15.       </ul>
16.       </>,document.getElementById("root")
17.   );
```

- **Output:**

← → C ⓘ localhost:3000

NETFLIX SERIES

- girls hostel
- lucifer
- ray
- mismatched
- little things

2. Write a program in ReactJS to get current Hours and display Greeting Message. Example◊if 1 to 12 –Good Morning,12 to 4 Good Afternoon,4 to 12 good Evening.
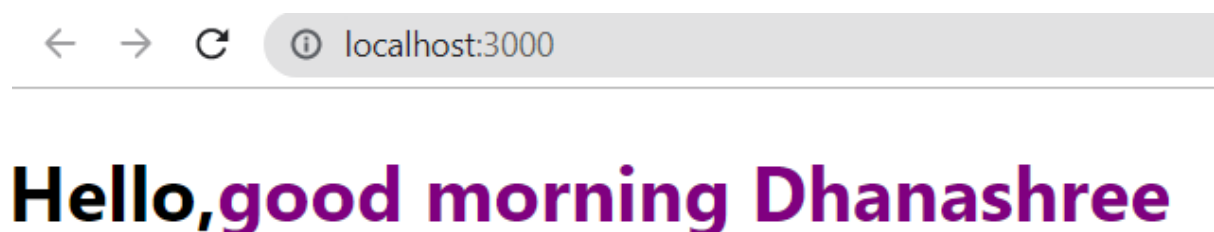
- **Code:**

```jsx
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App.js';
import reportWebVitals from './reportWebVitals';

let d=new Date(2021,5,5,5);
d=d.getHours();
let msg="";

const cssstyle={};
if(d>1 && d<12){
  msg="good morning Dhanashree"
  cssstyle.color="purple";
}
else if(d>12 && d<19){
  msg="good afternoon Dhanashree";
  cssstyle.color="blue";
}else{
  msg="good night Dhanashree";
  cssstyle.color="red";
}
ReactDOM.render(<h1>Hello,<span style={cssstyle}>{msg}</span></h1>,document.ge
tElementById("root"));

reportWebVitals();
```

- **Output:**

← → C ⓘ localhost:3000

Hello,good morning Dhanashree

                                                            ***

PRACTICAL – 10

1. Write a program in reactjs to create a Simple Web App for institute.) use functional component .(NOTE:Create separate file for heading and displaying list and apply CSS)
   - **Code:**
     - ➢ index.css

```
{/*Dhanashree 2109820*/}
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App.js';
import reportWebVitals from './reportWebVitals';
import Heading from './header';
import Paragraph from './paragraph';
ReactDOM.render
(
    <>
     <Heading/>
     <Paragraph/>
     <h3>Courses</h3>
     <ul>
     <li><a href="cs">BSC Computer science</a></li>
     <li><a href="it">BSC IT</a></li>
     <li><a href="Btech">Btech</a></li>
     <li><a href="mba">MBA</a></li>
     </ul>
     </>, document.getElementById('root')
);

reportWebVitals();
```
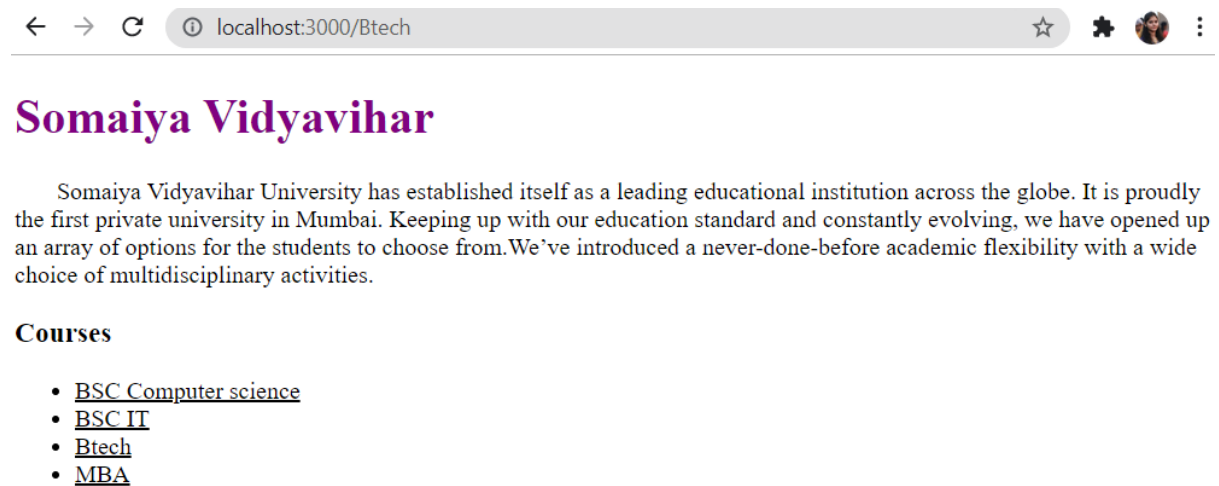
   - ➢ header.jsx

```
import React from 'react';
import './index.css';
function Heading()
{
    return <h1>Somaiya Vidyavihar</h1>
}

export default Heading;
```

   - ➢ paragraph.jsx

```
import React from 'react';
```

```
import './index.css';
function Paragraph()
{
    return <p>       Somaiya Vidyavihar Uni
versity has established itself as a leading educational institution across the
 globe. It is proudly the first private university in Mumbai. Keeping up with
our education standard and constantly evolving, we have opened up an array of
options for the students to choose from.We've introduced a never-done-
before academic flexibility with a wide choice of multidisciplinary activities
. </p>
}

export default Paragraph;
```

- **Output:**
  - ➤ BSC CS

  - ➤ Btech

2. Write a program in reactjs to create a class component for product. Create and display Information such as product name,product image and price. (Display atleast 5 product).
   - **Code:**
     - ➤ product.js

```
1. {/*Dhanashree 2109820*/}
2. import React from 'react';
3. import reactDom from 'react-dom';
4.
5. class Card extends React.Component{
6.     render(){
7.         return(
8.             <div>
9.             <h2>Product name, {this.props.productName} </h2>
10.            <img style={{height: "200px", width: "300px"}} src={this
   .props.source}/>
11.            <p>Description, {this.props.price}, {this.props.des}</p>
12.            </div>
13.            )
14.     }
15.}
16.
17.class ProductMenu extends React.Component{
18.     render(){
19.         return(
20.             <div style={{display: "flex", flexWrap: "wrap", width:"1
   00%"}}>
21.                 <Card source="https://images.pexels.com/photos/12793
   30/pexels-photo-
   1279330.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=1" productNa
   me="Noodles" price="1000rs" des="delicious noodles with arabian twis
   t"/>
22.                 <Card source="https://images.pexels.com/photos/11091
   97/pexels-photo-
   1109197.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=1" productNa
   me="veggies" price="900rs" des="hot red chilli mixed veggies"/>
23.                 <Card source="https://images.pexels.com/photos/16600
   30/pexels-photo-
   1660030.jpeg?auto=compress&cs=tinysrgb&w=1260&h=750&dpr=1" productNa
   me="Garlic bread" price="980rs" des="gralic breads with raita"/>
24.                 <Card source="https://images.unsplash.com/photo-
   1473093295043-
   cdd812d0e601?ixid=MnwxMjA3fDB8MHxzZWFyY2h8MTZ8fGZvb2R8ZW58MHx8MHx8&i
   xlib=rb-
   1.2.1&auto=format&fit=crop&w=500&q=60" productName="Pasta" price="88
   0rs" des="Western pasta with jaika sauce"/>
```

```
25.            <Card source="https://media.istockphoto.com/photos/h
   ot-dogs-for-game-day-picture-
   id1326146587?b=1&k=20&m=1326146587&s=170667a&w=0&h=PXRYyxj4ZN5HXPzQI
   RG8t5a-B4Np0z-
   vqVWlRYDQ7g4=" productName="Hot Dog buns" price="1290rs" des="HotDog
   s with indian twist and mint flavour"/>
26.            </div>
27.        )
28.    }
29.}
30.
31.export default ProductMenu
```

➢ index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App.js';
import reportWebVitals from './reportWebVitals';
import ProductMenu from './product.js';


ReactDOM.render(<ProductMenu/>,document.getElementById("root"));


// If you want to start measuring performance in your app, pass a function
// to log results (for example: reportWebVitals(console.log))
// or send to an analytics endpoint. Learn more: https://bit.ly/CRA-vitals
reportWebVitals();
```

- **Output:**

Product name, Noodles

Description, 1000rs, delicious noodles with arabian twist

Product name, veggies   **Product name, Garlic bread**

Description, 900rs, hot red chilli mixed veggiesDescription, 980rs, gralic breads with raita

***

PRACTICAL – 11

1. Write a program in reactjs to Given a stateless functional component, add state to it. Display Message{ You are currently logged In/Out} use if else and state.

   - **Code:**

     ➢ loginout.js

```
{/*Dhanashree 21099820*/}
import React from 'react';
import ReactDOM from 'react-dom';
class LogInOut extends React.Component {
    constructor() {
        super();
        this.state= {
            login: false,
        };
    }

    logClick= ()=> {
        console.log("click");
        this.setState({login: !this.state.login})
    }

    render() {
        return (
            <div>
                <h1>You are {this.state.login? <span>Log Out</span>: <span>Log
 In</span>}</h1>
                <button onClick={this.logClick}>{this.state.login? <span>Log O
ut</span>: <span>Log In</span>}</button>
                <p>{this.state.login}</p>
            </div>
        )
    }
}

export default LogInOut;
```
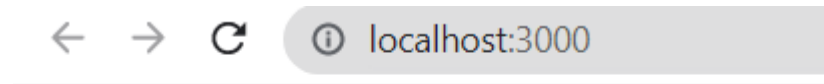
     ➢ index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App.js';
import reportWebVitals from './reportWebVitals';
```
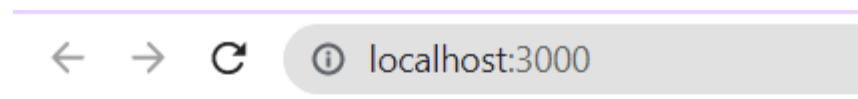
```
import LogInOut from './loginout.js';

ReactDOM.render(<LogInOut/>,document.getElementById("root"));
reportWebVitals();
```

- **Output:**

2. Write a program in reactjs to create react app to display number is odd or even on every single click of button using useState(Hook).
   - **Code:**
     - ➢ evenodd.js

```
import React, { useState } from 'react';

function EvenOdd() {
    const [Click, setClick] = useState(0);

    return(
        <div>
            <p>No of Clicks {Click}</p>
```

```
            <p>Clicks is {Click%2== 0? <span>Even</span> : <span>Odd</span>}!<
/p>

            <button onClick={()=> setClick(Click+1)}>Click Me</button>
        </div>
    )
}

export default EvenOdd;
```

> ➢ index.js

```
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App.js';
import reportWebVitals from './reportWebVitals';
import EvenOdd from './evenodd';


ReactDOM.render(<EvenOdd/>,document.getElementById("root"));

reportWebVitals();
```

- **Output:**

← → C ⓘ localhost:3000

No of Clicks 3

Clicks is Odd!

Click Me

← → C ⓘ localhost:3000

No of Clicks 4

Clicks is Even!

Click Me   ***

PRACTICAL – 12

1. Write a program in reactjs to demonstrate the use of arrays as a state variable (using useState()).(display cube of number on every single click).

- **Code:**

  ➢ index.js

```js
{/*Dhanashree 2109820*/}
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import App from './App.js';
import reportWebVitals from './reportWebVitals';

ReactDOM.render(<App/>,document.getElementById("root"));
reportWebVitals();
```

  ➢ app.js

```js
import React, { useState } from "react";
function App()
{
const [click, setClick] = useState([]);
const addNumber = () => {
setClick([ ...click,
{ id: click.length,
value: click.length * click.length * click.length, },
]);
};
return (
<div style={{ margin: "20px" }}>
<ul>
{click.map((item) => (
<li key={item.id}> The Cube of {item.id} is {item.value} </li> ))} </ul>
<button onClick={addNumber}>Increment</button> </div> ); } export default App;
```

- **Output:**

- The Cube of 0 is 0
- The Cube of 1 is 1
- The Cube of 2 is 8
- The Cube of 3 is 27
- The Cube of 4 is 64
- The Cube of 5 is 125

Increment

- The Cube of 0 is 0
- The Cube of 1 is 1
- The Cube of 2 is 8
- The Cube of 3 is 27
- The Cube of 4 is 64
- The Cube of 5 is 125
- The Cube of 6 is 216
- The Cube of 7 is 343
- The Cube of 8 is 512
- The Cube of 9 is 729
- The Cube of 10 is 1000
- The Cube of 11 is 1331

Increment

***

PRACTICAL – 13

2. Write a program in reactjs to demonstrate react form using hook.
   - **Code:**

   ➢ index.js

```
{/*Dhanashree 2109820*/}
import React from 'react';
import ReactDOM from 'react-dom';
import './index.css';
import Appp from './Appp.js';
import reportWebVitals from './reportWebVitals';

ReactDOM.render(<Appp/>,document.getElementById("root"));

reportWebVitals();
```

   ➢ appp.js

```
import React, { useState } from 'react';
const Appp=()=>{
  let  result;
        const[mydisp,setMyDisp]=useState("");
        const[myInfo,setMyInfo]=useState({
            firstName: "",
            lastName: "",
            age: "",
            gender: "",
            destination: "",
            isCricket: false,
            isMusic: false,
           isDance: false
        });

    const handleChange=(event)=> {
        const value=event.target.value;
        const name=event.target.name;
        setMyInfo((preValue)=>{

            return{
                ...preValue,
                [name]:value,
            }
            });
    };
    const show=(event)=>{
        event.preventDefault();
```

```
        //const firstName: myInfo.firstName

    result="Name: "+myInfo.firstName;
    setMyDisp("Name: "+myInfo.firstName+""+"Your age:" +myInfo.age+"Your de
stination: "+myInfo.destination);
    console.log(result);
    alert("hi"+result);
  }


  return (
      <>

          <form onSubmit={show}>
              <input
                  name="firstName"
                  value={myInfo.firstName}
                  onChange={handleChange}
                  placeholder="First Name"
              />
              <br />

              <input
                  name="lastName"
                value={myInfo.lastName}
                  onChange={handleChange}
                  placeholder="Last Name"
              />
              <br />

              <input
                  name="age"
                  value={myInfo.age}
                  onChange={handleChange}
                  placeholder="Age"
              />
              <br />

              <label>
                  <input
                      type="radio"
                      name="gender"
                      value="male"
                      checked={myInfo.gender === "male"}
                      onChange={handleChange}
                  /> Male
              </label>

              <br />
```

```jsx
                    <label>
                        <input
                            type="radio"
                            name="gender"
                            value="female"
                            checked={myInfo.gender === "female"}
                            onChange={handleChange}
                        /> Female
                    </label>

                    <br />

                    <select
                        value={myInfo.destination}
                        name="destination"
                        onChange={handleChange}
                    >
                        <option value="">-- Please Choose a destination --
</option>
                        <option value="germany">Germany</option>
                        <option value="norway">Norway</option>
                        <option value="north pole">North Pole</option>
                        <option value="south pole">South Pole</option>
                    </select>

                    <br />

                    <label>
                        <input
                            type="checkbox"
                            name="isCricket"
                            onChange={handleChange}
                            checked={myInfo.isCricket}
                        /> Cricket?
                    </label>
                    <br />

                    <label>
                        <input
                            type="checkbox"
                            name="isMusic"
                            onChange={handleChange}
                            checked={myInfo.isMusic}
                        /> Music?
                    </label>
                    <br />
```

```jsx
            <label>
                <input
                    type="checkbox"
                    name="isDance"
                    onChange={handleChange}
                    checked={myInfo.isDance}
                /> Dance?
            </label>
            <br />

            <button type="submit">Submit</button>

        </form>
        <hr />
        <h2>Entered information is:{mydisp}</h2>
        <p>Your name: {myInfo.firstName} {myInfo.lastName}</p>
        <p>Your age: {myInfo.age}</p>
        <p>Your gender: {myInfo.gender}</p>
        <p>Your destination: {myInfo.destination}</p>
        <p>Your selelcted:</p>

        <p>Cricket: {myInfo.isCricket ? "Cricket" : "No"}</p>
        <p>Music: {myInfo.isMusic ? "Music" : "No"}</p>
        <p>Dance: {myInfo.isDance ? "Yes" : "No"}</p>


        </>
    );
  }
export default Appp;
```

- **Output:**

Dhanashree	localhost:3000 says
MHAPRALKAR	hiName: Dhanashree
20	
○ Male	
● Female	OK
Norway ▾	
☐ Cricket?	
☑ Music?	
☐ Dance?	
Submit	

Entered information is:

Your name: Dhanashree MHAPRALKAR

Your age: 20

Your gender: female

Your destination: norway

Your selelcted:

Cricket: No

Music: Music

Dance: No

***