EXPERIMENT-1

1a

Aim:- Course Name: HTML5 - The Language Module Name: Case-insensitivity, Platform-independency, DOCTYPE Declaration, Types of Elements, HTML Elements - Attributes, Metadata Element Include the Metadata element in Homepage.html for providing description as "IEKart's is an online shopping website that sells goods in retail. This company deals with various categories like Electronics, Clothing, Accessories etc.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_28320667711144660000_shared?collectionId=lex_17739732834840810000_shared&collectionType=Course

Description:

 <meta charset="UTF-8">: Sets character encoding for proper text display.
<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with older Internet Explorer versions.
<meta name="viewport" content="width=device-width, initial-scale=1.0">: Makes the page responsive across devices.
 <meta name="description" content="...">: Provides a brief description of the website for search engines.<title>: Sets the webpage title shown on the browser tab.

Program:-

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta name="description" content="as IEkart's is an online shopping
website that sells goods in retail .This is the company deals with
various categories like Electronics,Clothing,Accessories etc.">
<meta name="Keywords" content="HTML,CSS,JavaScript">
<meta name="author" content="ADITYA">
<meta name="viewport" content="width=device-width,intial-scale=1.0">
<title> Demo web page</title>
</head>
<body>
<!--this is a comment in html-->
<h1>Online EKART SHOPPING WEBSITE</h1>
</body>
</html>
```

Output:-
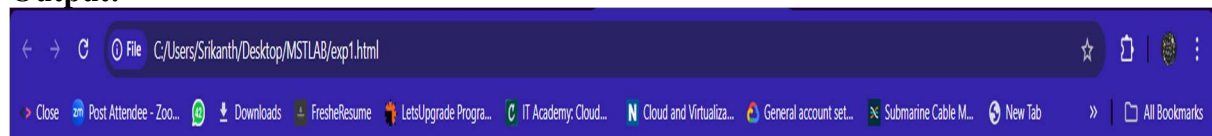
Online EKART SHOPPING WEBSITE

1b

Aim:-Course Name: HTML5 - The Language Module Name: Sectioning Elements Enhance the Homepage.html of IEKart's Shopping Application by adding appropriate sectioning elements.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_6372291347110857 000_shared?collectionId=lex_17739732834840810000_shared&collect AR20 AEC-AIML 276 ionType=Course

Description:-
<meta charset="UTF-8">: Sets character encoding for proper text display.
<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with older Internet Explorer versions.

Program:-
```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta name="description" content="as IEkart's is an online shopping website that sells goods in retail .This is the company deals with various categories like Electronics,Clothing,Accessories etc.">
<meta name="Keywords" content="HTML,CSS,JavaScript">
<meta name="author" content="ADITYA">
<meta name="viewport" content="width=device-width,intial-scale=1.0">
<title> Demo web page</title>
<style>
    aside{
        width:30%;
        padding-left:15px;
        margin-left:15px;
        float:right;
        font-style:italic;
        background-color:rgb(165, 144, 144);
}
   header{
        text-align:center;
        padding:3px;
        background-color:DarkSalmon;
        color:white;
}
  footer{
    text-align:center;
    padding:3px;
    background-color:DarkSalmon;
    color:white;
}

</style>
</head>
<header>
<article>
<h1>Online EKART SHOPPING WEBSITE</h1>
</article>
```

```
<aside>
<p>IEKart's is an online shopping website that sells good in
retail.This company deals with various categories like Electronics
Clothing,Accessories etc."</p>
</aside>
</header>
<body>
    <h2>Most Popular Websites</h2>
    <article class="browser">
        <nav>
        <a href="https://www.microsoft.com/en-
us/edge?form=MA13FJ">Edge</a>
        </nav>
    </article>
    <article class="browser">
            <nav>
            <a href="https://www.google.com">Google</a>
            </nav>
    </article>
     <article class="browser">
                <nav>
                    <a href="https://www.opera.com/">Opera</a>
                </nav>
    </article>
    <footer>
        <article>
            <h1>Online EKART Shopping website</h1>
            <p>Posted Aditya</p>
        </article>
    </footer>
</body>
</html>
```

Output:-
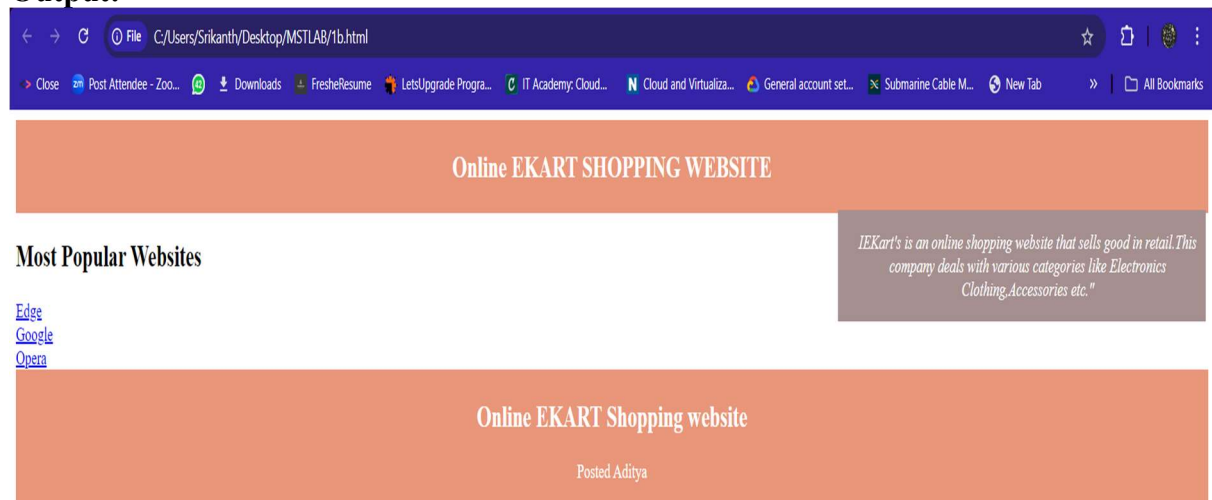
1c

Aim:- Course Name: HTML5 - The Language Module Name: Paragraph Element, Division and Span Elements, List Element Make use of appropriate grouping elements such as list items to "About Us" page of IEKart's Shopping Application.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_32785192040894940000 _shared?collectionId=lex_17739732834840810000_shared&colle ctionType=Course

Description:-
<meta charset="UTF-8">: Sets character encoding for proper text display.
<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with older Internet Explorer versions.

Program:-
```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta name="description" content="as IEKart's is an online shopping
website
that sells goods in retail. This company deals with various
categories
like Electronics, Clothing, Accessories etc.">
<meta name="keywords" content="HTML, CSS, JavaScript">
<meta name="author" content="ADITYA">
<meta name="viewport" content="width=device-width, initial-
scale=1.0">
<title> Demo web Page </title>
<style>
aside {
width: 30%; padding-left: 15px; margin-left: 15px; float: right;
font-style: italic; background-color: lightgray;
}

header {
text-align: center; padding: 3px;
background-color: DarkSalmon; color: white;
}

footer {
text-align: center; padding: 3px;
background-color: DarkSalmon; color: white;
}

li{padding: 4px;}
div{ color:blue;height: wrap; width: wrap}
</style>
</head>
<header>
<article>
```
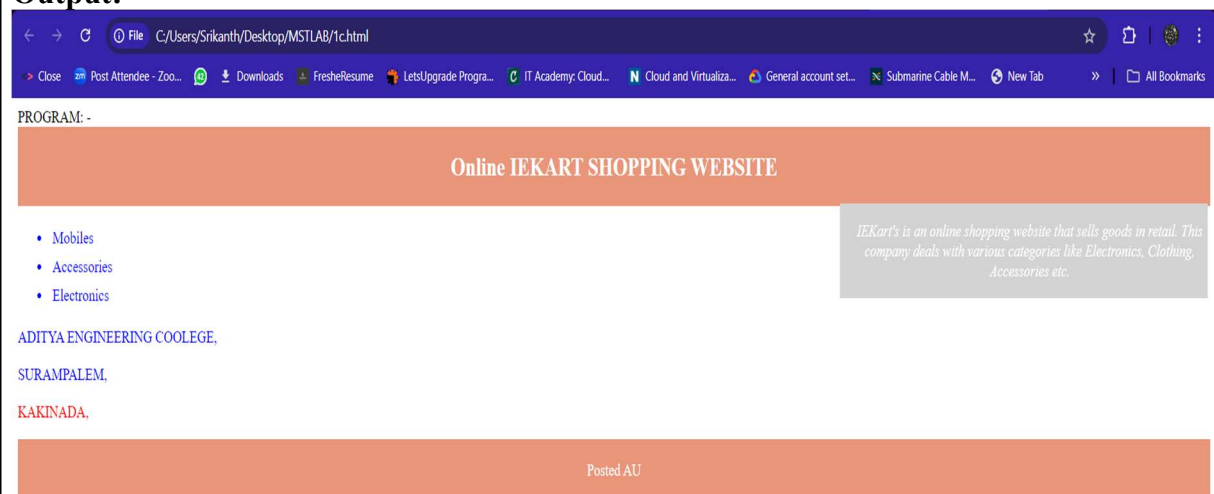
```html
<h1> Online IEKART SHOPPING WEBSITE</h1>
</article>
<aside>
<p>IEKart's is an online shopping website
that sells goods in retail. This company deals with various
categories like Electronics, Clothing, Accessories etc.</p>
</aside>
</header>
<body>
<!--this is a comment in HTML-->
<div>
<!--list attribute-->
<ul>
<li>Mobiles</li>
<li>Accessories</li>
<li>Electronics</li>
</ul>
</div>

 <!--div attribute-->
<div>
<!--paragraph attribute-->
<p> ADITYA ENGINEERING COOLEGE, </p>
<p> SURAMPALEM, </p>
<!--span attribute-->
<p><span style= "color:red"> KAKINADA,</span> </p>
</div>

<!--Sectioning element-->
<footer>
<article>
<p>Posted AU</p>
</article>
</footer>
</body>
</html>
```

Output:

1d
Aim:-Course Name: HTML5 - The Language Module Name: Link Element Link "Login",
"SignUp" and "Track order" to "Login.html", "SignUp.html" and "Track.html" page
respectively. Bookmark each category to its details of IEKart's Shopping application.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_1551510595327333
8000_shared?collectionId=lex_17739732834840810000_shared&colle ctionType=Course

Description:-
<meta charset="UTF-8">: Sets character encoding for proper text display.
<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with
older Internet Explorer versions.

Program:-
```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta name="description" content="as IEKart's is an online shopping
website that sells goods in retail. This company deals with various
categories like Electronics, Clothing, Accessories etc.">
<meta name="keywords" content="HTML, CSS, JavaScript">
<meta name="author" content="ADITYA">
<meta name="viewport" content="width=device-width, initial-
scale=1.0">
<title> Demo web Page </title>
<style> aside {
width: 30%; padding-left: 15px; margin-left: 15px; float: right;
font-style: italic; background-color: lightgray;
}

header {
text-align: center; padding: 3px;
background-color: DarkSalmon; color: white;
}

footer {
text-align: center; padding: 3px;
background-color: DarkSalmon; color: white;
}

li{padding: 4px;}
div{ color:blue;height: wrap; width: wrap}
</style>
</head>
<header>
<article>
<h1> Online IEKART SHOPPING WEBSITE</h1>
</article>
<aside>
<p>IEKart's is an online shopping website
that sells goods in retail. This company deals with various
categories like Electronics, Clothing, Accessories etc.</p>
```

```
</aside>
</header>
<body>
<!--this is a comment in HTML-->
<div>
<!--list link attribute-->
<ul>
<li><a href="Login.html">LOGIN</a></li>
<li><a href="SignUp.html">SIGN UP</a></li>
<li><a href="Track.html">TRACK ORDER</a></li>
</ul>
</div>

<!--div attribute-->
<div>
<!--paragraph attribute-->
<p> ADITYA  ENGINEERING COLLEGE, </p>
<p> SURAMPALEM, </p>
<!--span attribute-->
<p><span style= "color:red"> KAKINADA,</span> </p>
</div>

<!--Sectioning element-->
<footer>
<article>
<p>Posted AU</p>
</article>
</footer>
</body>
</html>
```
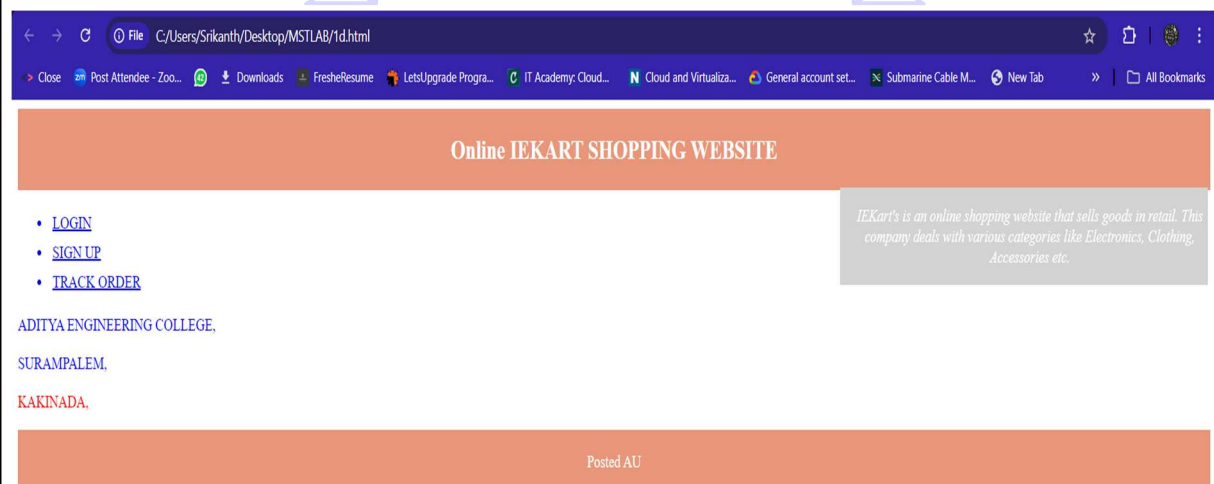
Output:-

1e.
Aim:- Course Name: HTML5 - The Language Module Name: Character Entities Add the ©
symbol in the Home page footer of IEKart's Shopping application.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_5476673769380962
60_shared?collectionId=lex_17739732834840810000_shared&collecti onType=Course
Description:-

<meta charset="UTF-8">: Sets character encoding for proper text display.
<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with
older Internet Explorer versions.

Program:-

```
<!DOCTYPE html>
<html>
<head>
<meta charset="UTF-8">
<meta name="description" content="as IEKart's is an online shopping
website that sells goods in retail. This company deals with various
categories like Electronics, Clothing, Accessories etc.">
<meta name="keywords" content="HTML, CSS, JavaScript">
<meta name="author" content="ADITYA">
<meta name="viewport" content="width=device-width, initial-
scale=1.0">
<title> Demo web Page </title>
<style> aside { width: 30%;
padding-left: 15px; margin-left: 15px; float: right;
font-style: italic; background-color: lightgray;
}

header {
text-align: center; padding: 3px;
background-color: DarkSalmon; color: white;
}

footer {
text-align: center; padding: 3px;
background-color: DarkSalmon; color: white;
}
li {padding: 4px;} div { color:blue;
height: wrap; width: wrap}

</style>
</head>
<header>

<article>
```

```
<h1> Online IEKART SHOPPING WEBSITE</h1>
</article>

<aside>
<p>IEKart's is an online shopping website that sells goods in
retail.
This company deals with various categories like Electronics,
Clothing, Accessories etc.</p>
</aside>
</header>

<body>
<!--this is a comment in HTML-->
<div>
<!--list link attribute-->
<ul>
<li><a href="Login.html">LOGIN</a></li>
<li><a href="SignUp.html">SIGN UP</a></li>
<li><a href="Track.html">TRACK ORDER</a></li>
</ul>
</div>
<!--div attribute-->
<div>
<!--paragraph attribute-->
<p> ADITYA ENGINEERING COLLEGE, </p>
<p> SURAMPALEM, </p>
<!--span attribute-->
<p><span style= "color:red"> KAKINADA,</span> </p>
</div>
<!--Sectioning element-->

<footer>
<article>
<!--ADDING COPY RIGHTS element-->
&copy; AEC
</article>
</footer>
</bod>
</html>
```

Output:
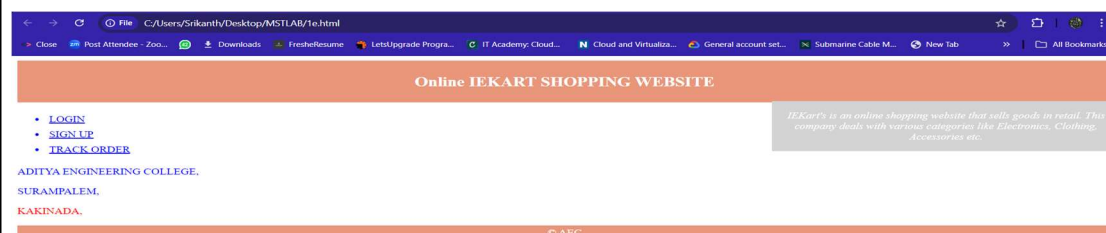
1f

Aim:-Course Name: HTML5 - The Language Module Name: HTML5 Global Attributes Add the global attributes such as contenteditable, spellcheck, id etc. to enhance the Signup Page functionality of IEKart's Shopping application.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_2872356605032192 0000_shared?collectionId=lex_17739732834840810000_shared&colle ctionType=Course

Description:
<meta charset="UTF-8">: Sets character encoding for proper text display.
<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with older Internet Explorer versions.

Program:-
```
<!DOCTYPE html>
<html>
<head>
<title> IEKart web Page </title>
<style> #myHeader { color: red;text-align: center;}
</style>
</head>
<header>
<article>
<h1> Online EKART SHOPPING WEBSITE</h1>
</article>
</header>

<body>
<!--contenteditable attribute-->
<p contenteditable="true">This is a paragraph. It is editable.
Try to change this text.</p>
<!--spellcheck attribute-->
<p contenteditable="true" spellcheck="true">This is a spellcheck</p>

<footer>
<article>
<h1 id="myHeader"> Online EKART SHOPPING WEBSITE</h1>
<p>Posted AU</p>
</article>
</footer>

</body>
</html>
```

Output:-

EXPERIMENT-2

2a

Aim:-Course Name: HTML5 - The Language Module Name: Creating Table Elements,
Table Elements : Colspan/Rowspan Attributes, border, cellspacing, cellpadding attributes
Enhance the details page of IEKart's Shopping application by adding a table element to
display the available mobile/any inventories.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_auth_013168035284
033536113_shared?collectionId=lex_17739732834840810000_shared&collectionType=Cour
se

Description:

<meta charset="UTF-8">: Sets character encoding for proper text display.

<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with
older Internet Explorer versions.

Program:-

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>IEKart Inventory</title>
    <style>
        table {
            border-collapse: collapse;
            width: 80%;
            margin: 20px auto;
        }
        th, td {
            border: 1px solid black;
            padding: 10px;
            text-align: center;
        }
        th {
            background-color: #f2f2f2;
        }
    </style>
</head>
<body>
    <h1>IEKart Mobile Inventory</h1>
    <table border="1" cellspacing="5" cellpadding="10">
        <tr>
            <th>Model Name</th>
            <th>Brand</th>
            <th>Price</th>
            <th colspan="2">Specifications</th>
        </tr>
        <tr>
            <td>Galaxy S21</td>
            <td>Samsung</td>
            <td>$799</td>
            <td>128GB</td>
            <td rowspan="2">5G</td>
```
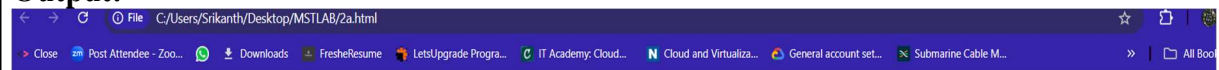
```
        </tr>
        <tr>
            <td>iPhone 12</td>
            <td>Apple</td>
            <td>$999</td>
            <td>256GB</td>
        </tr>
        <tr>
            <td colspan="2">Total Mobiles Available</td>
            <td colspan="3">50</td>
        </tr>
    </table>
</body>
</html>
```
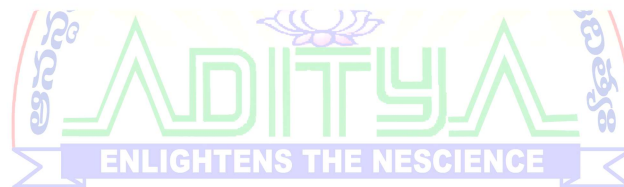
Output:

C:/Users/Srikanth/Desktop/MSTLAB/2a.html

IEKart Mobile Inventory

Model Name	Brand	Price	Specifications	
Galaxy S21	Samsung	$799	128GB	5G
iPhone 12	Apple	$999	256GB	
Total Mobiles Available			50	

2b

Aim:- Course Name: HTML5 - The Language Module Name: Creating Form Elements, Color and Date Pickers, Select and Datalist Elements Using the form elements create Signup page for IEKart's Shopping application.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_13975270903118459000 _shared?collectionId=lex_17739732834840810000_shared&collectionType=Course
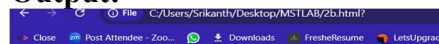
Description:

<meta charset="UTF-8">: Sets character encoding for proper text display.

<meta http-equiv="X-UA-Compatible" content="IE=edge">: Ensures compatibility with older Internet Explorer versions.

Program:-

```html
<!DOCTYPE html>
<html>
<head>
    <title>Signup</title>
</head>
<body>
    <h1>IEKart Signup Form</h1>
    <form>
        <label>Name:</label><input type="text" required><br><br>
        <label>Email:</label><input type="email" required><br><br>
        <label>Password:</label><input type="password"
required><br><br>
        <label>Date of Birth:</label><input type="date"
required><br><br>
        <label>Gender:</label>
        <select>

<option>Male</option><option>Female</option><option>Other</option>
        </select><br><br>
        <label>Favorite Color:</label><input type="color"><br><br>
        <label>Mobile Brand:</label>
        <input list="brands"><datalist id="brands">
            <option>Apple</option><option>Samsung</option>
        </datalist><br><br>
        <input type="submit" value="Signup">
    </form>
</body>
</html>
```

Output:-

2c

Aim:- Course Name: HTML5 - The Language Module Name: Input Elements – Attributes Enhance Signup page functionality of IEKart's Shopping application by adding attributes to input elements.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_1404841453706234 7000_shared?collectionId=lex_17739732834840810000_shared&collectionType=Course

Description:

\<meta charset="UTF-8"\>: Sets character encoding for proper text display.

\<meta http-equiv="X-UA-Compatible" content="IE=edge"\>: Ensures compatibility with older Internet Explorer versions.

Program:

```
<!DOCTYPE html>
<html>
<body>
<h2>Input Attributes</h2>
<form action="/action_page.php">
<label for="fname">First name:</label><br>
<input type="text" id="fname" name="fname"><br>

<label for="lname">Last name:</label><br>
<input type="text" id="lname" name="lname"><br>

<label for="pwd">Password:</label><br>
<input type="password" id="pwd" name="pwd"><br>
<input type="radio" id="html" name="fav_language" value="HTML">

<label for="html">HTML</label><br>
<input type="radio" id="css" name="fav_language" value="CSS">

<label for="css">CSS</label><br>
<input type="radio" id="javascript" name="fav_language"
value="JavaScript">

<label for="javascript">JavaScript</label><br><br>
<input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">

<label for="vehicle1"> I have a bike</label><br>
<input type="checkbox" id="vehicle2" name="vehicle2" value="Car">

<label for="vehicle2"> I have a car</label><br>
<input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">

<label for="vehicle3"> I have a boat</label><br>
<input type="submit" value="Submit">
</form>
</body>
</html>
```

Output:

← → C | ⓘ File C:/Users/Srikanth/Desktop/MSTLAB/2c.html ☆ Σ

> Close | zm Post Attendee - Zoo... | Downloads | FresheResume | LetsUpgrade Progra... | IT Academy: Cloud... | N Cloud and Virtualiza... | General account set... | Submarine Cable M... | »
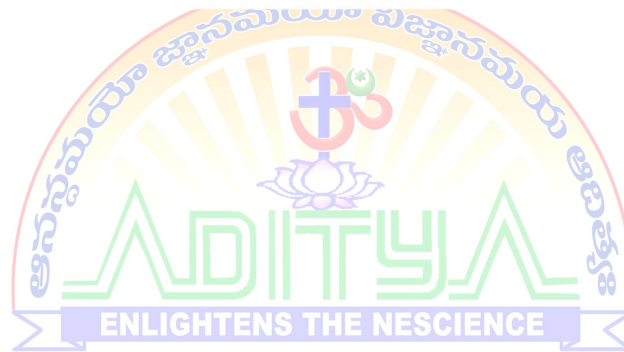
c) Module Name: Input Elements - Attributes Enhance Signup page functionality of IEKart's Shopping application by adding attributes to input elements. PROGRAM: -

Input Attributes

First name:

Last name:

Password:

○ HTML
○ CSS
○ JavaScript

☐ I have a bike
☐ I have a car
☐ I have a boat

Submit

2d

Aim:-Course Name: HTML5 - The Language Module Name: Media, Iframe Add media content in a frame using audio, video, iframe elements to the Home page of IEKart's Shopping application.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_30738402225794945000_shared?collectionId=lex_17739732834840810000_shared&colle ctionType=Course

Description:-

Program:-

```
<<!DOCTYPE html>

<html>

<head>

    <title></title>

</head>

<body>

    <video height="300"width="600" controls>

    <source src="div.mp4" type="video/mp4">

</video>

<audio controls>

    <source src="kav.mp3" type="audio/mp3">

    </audio>

<iframe width="600" height="400"
src="https://www.youtube.com/embed/videoid"
allowfullscreen></iframe>

</body>

</html>
```

Output:
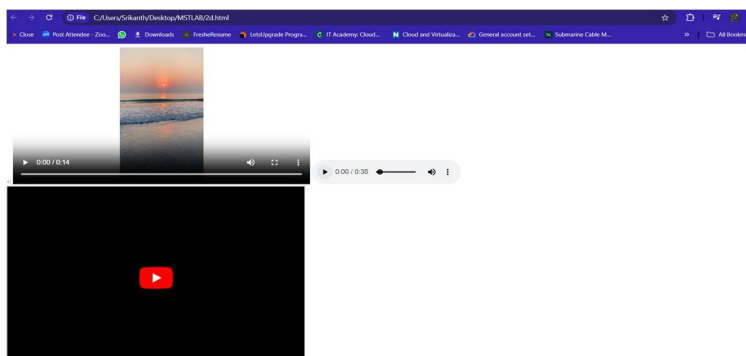
EXPERIMENT-3

3a

Aim:-Course Name: Javascript Module Name: Type of Identifiers Write a JavaScript program to find the area of a circle using radius (var and let - reassign and observe the difference with var and let) and PI (const).

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_auth_013053264414818304732_shared?collectionId=lex_18109698366332810000_shared&collectionType=Course

Description:

var and let to declare and reassign the radius of the circle.

const to declare the value of π (PI), since its value should not change.

Program:-

```
<!DOCTYPE html>

<html>

<head>

<title> Area of Circle</title>

</head>

<body>

<h1>Area of the circle</h1>

<script>

let r=5;

const PI=3.14;

let area=PI*r*r;

document.write(area);

</script>

</body>

</html>
```

Output:

C:/Users/Srikanth/Desktop/MSTLAB/3a.html

> Close | Post Attendee - Zoo... | Downloads | FresheResume | LetsUpgrade Progra... | IT Academy: Cloud... | Cloud and Virtualiza... | General account set... | Submarine Cable M...

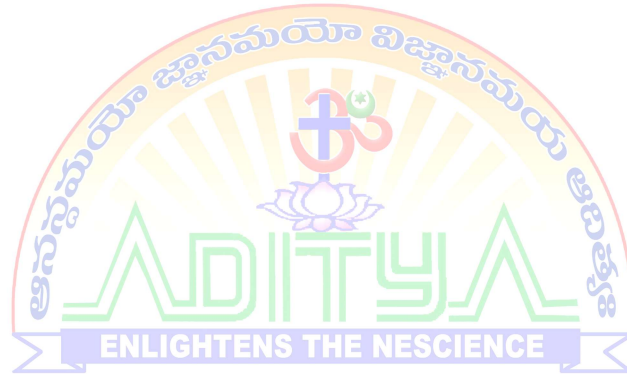**Area of the circle**

78.5

3b

Aim: Course Name: Javascript Module Name: Primitive and Non Primitive Data Types Write JavaScript code to display the movie details such as movie name, starring, language, and ratings. Initialize the variables with values of appropriate types. Use template literals wherever necessary. https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_21528322245232402000 _shared?collectionId=lex_18109698366332810000_shared&colle ctionType=Course

Description:

var and let to declare and reassign the radius of the circle.

const to declare the value of π (PI), since its value should not change.

Program:-

```html
<!DOCTYPE html>

<html>
<head>
<title>Movie Details</title>
</head>
<body>

<h1><p id="temp"></p></h1>

<div id="moviesList"></div>

<script>
// Using template literals
let t = 'Movies List "Favourite"';
document.getElementById("temp").innerHTML = t;

var movies = [
    {
        name: 'RRR',
        starring: 'Charan, NTR',
        language: 'Telugu',
        rating: '5'
    },
    {
        name: 'Pushpa',
        starring: 'Allu "Arjun"',
        language: 'Telugu',
        rating: '5'
    }
];

let movieDetails = "";
for (var i = 0; i < movies.length; i++) {
    movieDetails += movies[i].name + " | " + movies[i].starring + "
| " + movies[i].language + " | " + movies[i].rating + '<br>';
}

// Output movie details in the div
```

```
document.getElementById("moviesList").innerHTML = movieDetails;

</script>

</body>
</html>
```

Output:

Movies List "Favourite"

RRR | Charan, NTR | Telugu | 5

Pushpa | Allu "Arjun" | Telugu | 5

3c

Aim:-Course Name: Javascript Module Name: Operators and Types of Operators Write JavaScript code to book movie tickets online and calculate the total price, considering the number of tickets and price per ticket as Rs. 150. Also, apply a festive season discount of 10% and calculate the discounted amount.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_1380833838448172 0000_shared?collectionId=lex_18109698366332810000_shared&colle ctionType=Course

Description:

var and let to declare and reassign the radius of the circle.

const to declare the value of π (PI), since its value should not change.

Program:
```
<!DOCTYPE html>
<html>
<head>
<title>Ticket Booking</title>
</head>
<body>
<h1>Ticket Booking</h1>
<script>
let seats=prompt("Enter number of seats");
let price=150;
let discount=1;
</script>
```

Output:
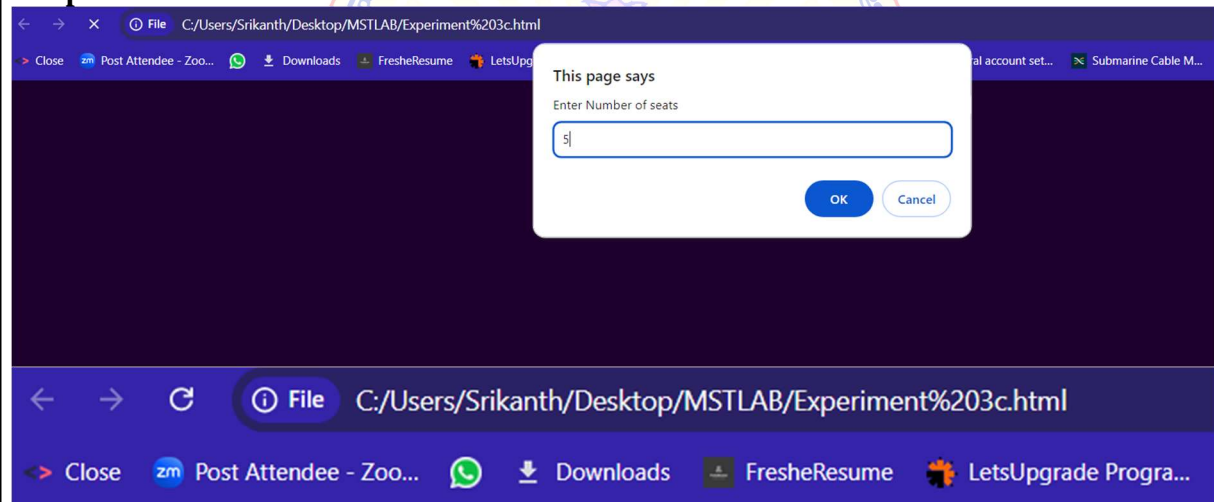
3d

Aim:-Course Name: Javascript Module Name: Types of Statements, Non - Conditional Statements, Types of Conditional Statements, if Statements, switch Statements Write a JavaScript code to book movie tickets online and calculate the total price based on the 3 conditions: (a) If seats to be booked are not more than 2, the cost per ticket remains Rs. 150. (b) If seats are 6 or more, booking is not allowed. (c) If seats to be booked are more than 2 but less than 6, based on the number of seats booked, do the following - Calculate total cost by applying discounts of 3, 5, 7, 9, 11 percent, and so on for customer 1,2,3,4 and 5. Try the code with different values for the number of seats.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_16257498471333610000_shared?collectionId=lex_18109698366332810000_shared&colle ctionType=Course

Description:
var and let to declare and reassign the radius of the circle.
const to declare the value of π (PI), since its value should not change.

Program:
```html
<!DOCTYPE html>
<html>
    <head>
        <title>Ticket Booking</title>
    </head>
    <body>
        <h1>Ticket Booking</h1>
        Seats: <input type="text" id="tickets">
        <button onclick="myFunction()">Submit</button><br><br>
        Total Amount:<p id="demo"></p>
        <script>
            function myFunction()
            {
                var x=parseInt(document.getElementById("tickets").value);
                let price=150;
                if(x<=2)
                {
                    document.getElementById("demo").innerHTML=x*price;
                }
                else if(x==3)
                {
                    document.getElementById("demo").innerHTML=x*price;
                }
                else if(x==4)
                {
                    document.getElementById("demo").innerHTML=x*price;
                }
                else if(x==5)
                {
                    document.getElementById("demo").innerHTML=x*price;
                }
                if(x>=6)
                {
                    document.getElementById("demo").innerHTML="6 or more
tickets are not allowed";
                }
```

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

Output:

Ticket Booking

Seats: 5   Submit
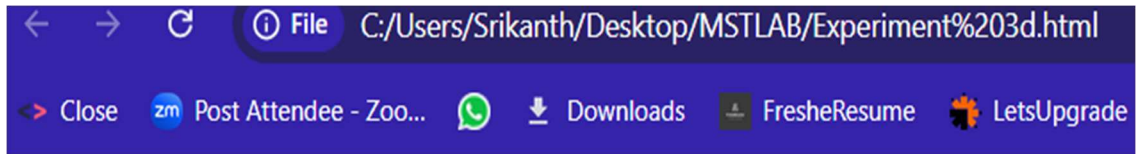
Total Amount:

750

3e

Aim:- Course Name: Javascript Module Name: Types of Loops Write a JavaScript code to book movie tickets online and calculate the total price based on the 3 conditions: (a) If seats to be booked are not more than 2, the cost per ticket remains Rs. 150. (b) If seats are 6 or more, booking is not allowed. (c) If seats to be booked are more than 2 but less than 6, based on the number of seats booked, do the following - Calculate total cost by applying a discount of 3, 5, 7, 9, 11 percent, and so on for customers till 5 respectively. Try the code with different values for the number of seats. Implement the problem statement using 'for' loop, 'while' loop and 'do-while' loop.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_6238536888292970000_shared?collectionId=lex_18109698366332810000_shared&collect ionType=Course

Description:
var and let to declare and reassign the radius of the circle.
const to declare the value of π (PI), since its value should not change

Program:

```html
<!DOCTYPE html>
<html>
<head>
    <title>Movie Tickets Booking</title>
</head>
<body>
    <label for="num1">Enter Number Of Seats - </label>
    <input type="number" id="num1">
    <button onclick="getFare()">GET FARE</button>
    <h1 id="h1" style="display:none;"></h1>

    <script type="text/javascript">
        function getFare() {
            let seats =parseInt(document.getElementById("num1").value);
            let price = 150;
            let totalfare = 0;

            if (isNaN(seats) || seats < 1) {
w
                document.getElementById("h1").style.display = "block";
                return;
            }

            if (seats <= 2) {
                totalfare = price * seats;
            } else if (seats >= 6) {
                document.getElementById("h1").innerHTML = "Booking is not allowed for 6 or more seats.";
                document.getElementById("h1").style.display = "block"; // Add this line to show the message
                return; // Exit the function
            } else {
                let discount = 0;
                for (let i = 3; i <= seats; i++) {
```

```
            discount += 2; // Increment discount for each
additional seat
            }
            let discountAmount = (discount / 100) * (seats *
price); // Correct variable name
            totalfare = (seats * price) - discountAmount; //
Corrected variable name
        }

        document.getElementById("h1").innerHTML = "Total Fare: " +
totalfare.toFixed(2);
        document.getElementById("h1").style.display = "block";
// Show the total fare
        }
    </script>
</body>
</html>
```

Output:
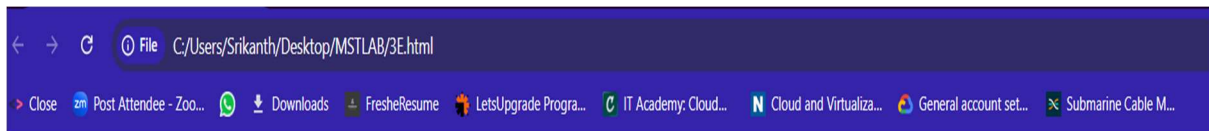
EXPERIMENT-4

4a

Aim:-Course Name: Javascript Module Name: Types of Functions, Declaring and Invoking Function, Arrow Function, Function Parameters, Nested Function, Built-in Functions, Variable Scope in Functions Write a JavaScript code to book movie tickets online and calculate the total price based on the 3 conditions: (a) If seats to be booked are not more than 2, the cost per ticket remains Rs. 150. (b) If seats are 6 or more, booking is not allowed. (c) If seats to be booked are more than 2 but less than 6, based on the number of seats booked, do the following - Calculate total cost by applying a discount of 3, 5, 7, 9, 11 percent, and so on for customers till 5 respectively. Try the code with different values for the number of seats. Write the following custom functions to implement given requirements: i. calculateCost(seats): Calculate and display the total cost to be paid by the customer for the tickets they have bought. ii. calculateDiscount(seats): Calculate discount on the tickets bought by the customer. Implement using arrow functions. https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_1545519957061332 6000_shared?collectionId=lex_18109698366332810000_shared&colle ctionType=Course

Description:

Invoking Function: The function bookTickets(seats) is invoked with the number of seats to process the booking.

Arrow Function: The calculateDiscount function is an arrow function that calculates the discount based on the number of seats booked.

Function Parameters: Functions like bookTickets(seats) and calculateCost(seats, costPerTicket) use parameters to accept the number of seats and ticket price.

Nested Function: The bookTickets function calls the calculateCost and calculateDiscount functions, demonstrating nested function calls.

Built-in Functions: The code uses console.log() (a built-in JavaScript function) to output the result.

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Movie Ticket Booking</title>
</head>
<body>
    <h1>Movie Ticket Booking System</h1>
    <label for="seats">Enter number of seats to book:</label>
    <input type="number" id="seats" min="1" />
    <button id="bookButton">Book Tickets</button>

    <script>
        // Function to calculate discount based on the number of
seats
        const calculateDiscount = (seats) => {
            // Discounts for seats from 3 to 5
            const discounts = [0, 3, 5, 7, 9, 11]; // discounts for
3, 4, 5 seats respectively
```

```
            // If seats are 3 or more, return the discount
percentage
            if (seats >= 3 && seats <= 5) {
                return discounts[seats - 3]; // discounts[0] is for
3 seats, etc.
            }

            // If seats are less than 3 or more than 5, no discount
            return 0;
        };

        // Function to calculate total cost based on the number of
seats
        const calculateCost = (seats) => {
            const costPerTicket = 150; // Cost per ticket
            let totalCost;

            // Check the conditions for booking
            if (seats < 3) {
                // Condition (a): If seats to be booked are not more
than 2
                totalCost = seats * costPerTicket;
            } else if (seats >= 6) {
                // Condition (b): If seats are 6 or more, booking is
not allowed
                console.log("Booking is not allowed for 6 or more
seats.");
                return null;
            } else {
                // Condition (c): More than 2 but less than 6
                const discount = calculateDiscount(seats);
                totalCost = seats * costPerTicket * (1 - discount /
100);
            }

            console.log(`Total cost for booking ${seats} seat(s):
Rs. ${totalCost.toFixed(2)}`);
            return totalCost;
        };

        // Event listener for the button click

document.getElementById("bookButton").addEventListener("click", ()
=> {
            const seats =
parseInt(document.getElementById("seats").value);
            if (!isNaN(seats) && seats > 0) {
                calculateCost(seats);
            } else {
                console.log("Please enter a valid number of
seats.");
            }
        });
    </script>
```
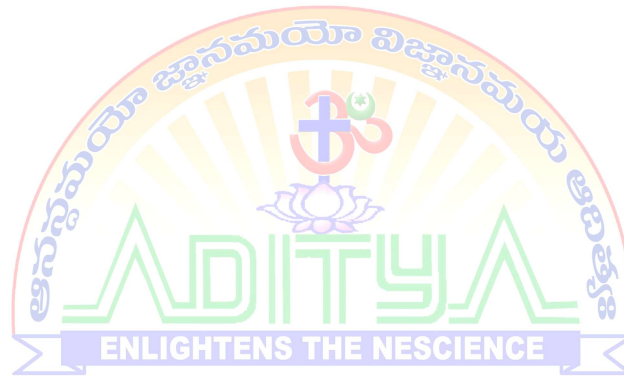
```
</body>
</html>
```

Output:

4b

Aim:-Course Name: Javascript Module Name: Working With Classes, Creating and Inheriting Classes Create an Employee class extending from a base class Person. Hints: (i) Create a class Person with AR20 AEC-AIML 278 name and age as attributes. (ii) Add a constructor to initialize the values (iii) Create a class Employee extending Person with additional attributes role and contact (iv) The constructor of the Employee to accept the name, age, role and contact where name and age are initialized through a call to super to invoke the base class constructor (v)Add a method getDetails() to display all the details of Employee.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_auth_012599811117 760512458_shared?collectionId=lex_18109698366332810000_shared &collectionType=Course

Description:

The <script> tag contains the JavaScript code that defines the Person and Employee classes and creates instances of these classes.

The details of each employee are displayed dynamically by modifying the inner HTML of the output <div>.

Program:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-
scale=1.0">
    <title>Employee Class Example</title>
</head>
<body>
    <h1>Employee Details</h1>
    <div id="output"></div> <!-- This will display the output -->

    <script>
        // Step 1: Create the Person class
        class Person {
            constructor(name, age) {
                this.name = name; // Initialize name
                this.age = age;   // Initialize age
            }
        }

        // Step 2: Create the Employee class extending Person
        class Employee extends Person {
            constructor(name, age, role, contact) {
                super(name, age); // Call the constructor of Person
                this.role = role; // Initialize role
                this.contact = contact; // Initialize contact
            }

            // Step 3: Method to get details of Employee
            getDetails() {
```

```
                return `Name: ${this.name}, Age: ${this.age}, Role:
${this.role}, Contact: ${this.contact}`;
            }
        }

        // Example usage
        const employee1 = new Employee('Alice Johnson', 30,
'Software Developer', '123-456-7890');
        const employee2 = new Employee('Bob Smith', 25, 'Data
Scientist', '987-654-3210');

        // Display the employee details on the webpage
        const outputDiv = document.getElementById('output');
        outputDiv.innerHTML += `<p>${employee1.getDetails()}</p>`;
        outputDiv.innerHTML += `<p>${employee2.getDetails()}</p>`;
    </script>
</body>
</html>
```

Output:
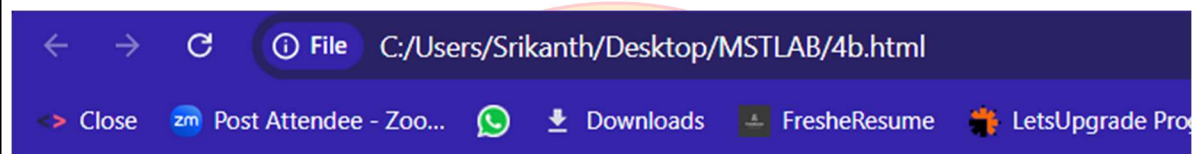
Employee Details

Name: Alice Johnson, Age: 30, Role: Software Developer, Contact: 123-456-7890

Name: Bob Smith, Age: 25, Role: Data Scientist, Contact: 987-654-3210

4c

Aim:- Course Name: Javascript Module Name: In-built Events and Handlers Write a JavaScript code to book movie tickets online and calculate the total price based on the 3 conditions: (a) If seats to be booked are not more than 2, the cost per ticket remains Rs. 150. (b) If seats are 6 or more, booking is not allowed. (c) If seats to be booked are more than 2 but less than 6, based on the number of seats booked, do the following - Calculate total cost by applying discounts of 3, 5, 7, 9, 11 percent, and so on for customer 1,2,3,4 and 5. Try the code with different values for the number of seats. Write the following custom functions to implement given requirements: (i) calculateCost(seats): Calculate and display the total cost to be paid by the customer for the tickets he has bought. (ii) calculateDiscount(seats): Calculate discount on the tickets bought by the customer. Invoke this function only when the user clicks on a link/button.

https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_4192188372573027 000_shared?collectionId=lex_18109698366332810000_shared&collect ionType=Course

Description:

The <script> tag contains the JavaScript code that defines the Person and Employee classes and creates instances of these classes.

The details of each employee are displayed dynamically by modifying the inner HTML of the output <div>.

Program:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Movie Ticket Booking</title>

    <style>

        body {

            font-family: Arial, sans-serif;

            margin: 20px;

        }

        label, button {

            margin: 10px 0;

            display: block;

        }

        #result {
```

```
            margin-top: 20px;

        }

    </style>

</head>

<body>

    <h1>Book Movie Tickets</h1>

    <label for="seats">Enter number of seats to book:</label>

    <input type="number" id="seats" min="1" max="6" required>

    <button id="bookButton">Book Tickets</button>


    <div id="result"></div> <!-- This will display the result -->


    <script>

        // Function to calculate the total cost

        function calculateCost(seats) {

            const costPerTicket = 150; // Cost per ticket

            let totalCost = seats * costPerTicket; // Total cost
without discount


            // Apply discount if seats are between 3 and 5

            if (seats > 2 && seats < 6) {

                let discount = calculateDiscount(seats); // Get
discount

                totalCost -= totalCost * (discount / 100); // Apply
discount

            }

            return totalCost; // Return final total cost

        }


        // Function to calculate the discount

        function calculateDiscount(seats) {

            const discountRates = [3, 5, 7, 9, 11]; // Discount
rates for 3, 4, 5 seats

            return discountRates[seats - 3] || 0; // Return the
discount rate
```

```
        }


        // Event listener for button click

document.getElementById('bookButton').addEventListener('click',
function() {
            const seats =
parseInt(document.getElementById('seats').value);
            const resultDiv = document.getElementById('result');
            resultDiv.innerHTML = ''; // Clear previous results


            // Check booking conditions
            if (seats > 6) {
                resultDiv.innerHTML = "Booking not allowed for more
than 6 seats.";
            } else if (seats <= 2) {
                const totalCost = calculateCost(seats);
                resultDiv.innerHTML = `Total cost for ${seats}
seat(s): Rs. ${totalCost}`;
            } else {
                const totalCost = calculateCost(seats);
                resultDiv.innerHTML = `Total cost for ${seats}
seat(s): Rs. ${totalCost}`;
            }
        });
    </script>
</body>
</html>
```

Output:

4d

Aim:- Course Name: Javascript Module Name: Working with Objects, Types of Objects, Creating Objects, Combining and cloning Objects using Spread operator, Destructuring Objects, Browser Object Model, Document Object Model If a user clicks on the given link, they should see an empty cone, a different heading, and a different message and a different background color. If user clicks again, they should see a re-filled cone, a different heading, a different message, and a different color in the background.
https://infyspringboard.onwingspan.com/web/en/viewer/webmodule/lex_1319702586280410 0000_shared?collectionId=lex_18109698366332810000_shared&colle ctionType=Course

Description:

The <script> tag contains the JavaScript code that defines the Person and Employee classes and creates instances of these classes.

The details of each employee are displayed dynamically by modifying the inner HTML of the output <div>.

Program:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Ice Cream Cone Toggle</title>

    <style>

        body {

            font-family: Arial, sans-serif;

            text-align: center;

            margin: 50px;

            transition: background-color 0.5s;

        }

    </style>

</head>

<body>

    <h1 id="heading">Welcome to the Ice Cream Shop!</h1>

    <div id="cone">Empty Cone</div>

    <div id="message">Click the link to fill the cone!</div>

    <a href="#" id="toggleButton">Click me!</a>
```

```
    <script>

        // Initial state

        let isFilled = false;


        // Function to toggle the cone state

        function toggleCone() {

            isFilled = !isFilled; // Toggle the state


            // Update the content based on the state

            document.getElementById("cone").innerText = isFilled ?
"Filled Cone" : "Empty Cone";

            document.getElementById("message").innerText = isFilled

                ? "The cone is now filled! Enjoy your treat!"

                : "Click the link to fill the cone!";

            document.body.style.backgroundColor = isFilled ?
"#FFCCCB" : "#ADD8E6"; // Change background color

        }


        // Attach click event to the link

document.getElementById("toggleButton").addEventListener("click",
function(event) {

            event.preventDefault(); // Prevent the default anchor
click behavior

            toggleCone();

        });

    </script>

</body>

</html>
```

Output: