GIFT School of Engineering and Applied Sciences

Fall 2022

CS-120 Introduction to Information and Communication Technology

Lab-11 Manual

Introduction to CSS-II

Introduction to Lab 11:

In this Lab Students will Practice the following CSS style properties.

- Background color and images
- Borders
- Margin and Padding
- Height and width
- Float
- Text styles
- Anchor states
- Table styles
- Opacity

1. CSS Style Properties

Before starting CSS properties Practice, do the following tasks:

1. Create a new project folder "My Website"
2. Inside the folder make three more folders:
   a. Pages
   b. CSS
   c. Images
3. We will make a website and practice css properties.

2. Backgrounds

We have two options

   a. Background color

   b. Background Image

1. Create HTML webpage inside pages folder and name it "home".

2. Write code for basic HTML structure inside the home page.

3. Now create a file named "styleforhome.css" inside CSS folder.

4. Inside styleforhome file write the following code for changing background color of home page.

```
body{
background-color: #95C8F7
}
```

5. Now link the styleforhome.css file to home.html file as:

```
<link rel="stylesheet" href="../CSS/styleforhome.css">
```

Now the home Page will look like:

6. Now create a second Page in pages folder "services.html"

7. For this page create a stylesheet in CSS folder "styleforservices.css"

8. Link both files by writing the following in services.html:
   <link rel="stylesheet" href="../CSS/styleforservices.css">

9. To apply background image in services page.
   a. Place a suitable image in Images folder.
   b. In styleforservices.css file write the following:

   body{

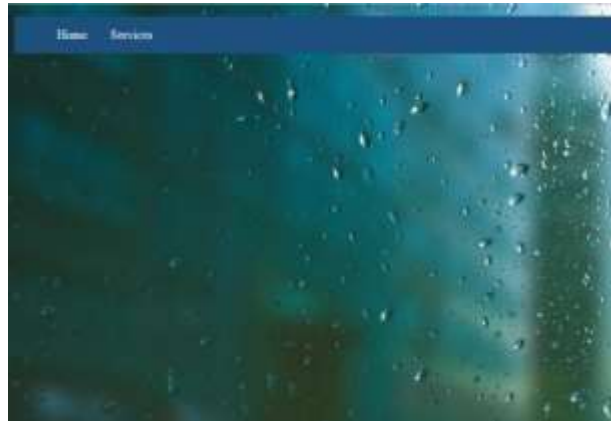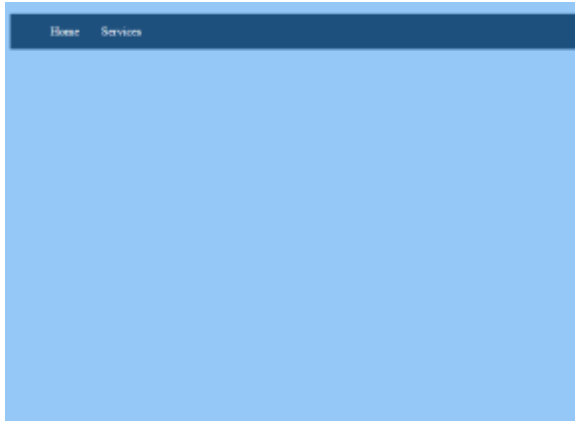   background-image: url("../Images/servicesbackground.jpg");

   }

   The services page will look like following:

Task 1:

Create a navigation bar in both pages with two links(home and services).

After the completion of task both pages will have a navigation bar.

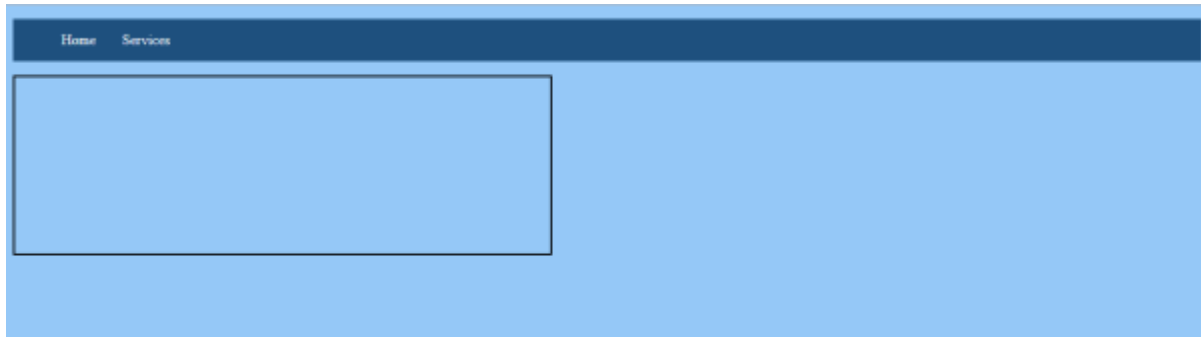We can create borders of HTML elements. A border has border-style, border-width and border-color.

Border-style can have following values:

- **dotted** - Defines a dotted border
- **dashed** - Defines a dashed border
- **solid** - Defines a solid border
- **double** - Defines a double border
- **groove** - Defines a 3D grooved border. The effect depends on the border-color value
- **ridge** - Defines a 3D ridged border. The effect depends on the border-color value
- **inset** - Defines a 3D inset border. The effect depends on the border-color value
- **outset** - Defines a 3D outset border. The effect depends on the border-color value
- **none** - Defines no border

1. Create a div in home page and give id="div1"

2. Set its width 45% and height 200px in its stylesheet.

3. Apply border as:
   #div1{
   border-style:solid;
   border-width: 2px;
   border-color:# 092641;
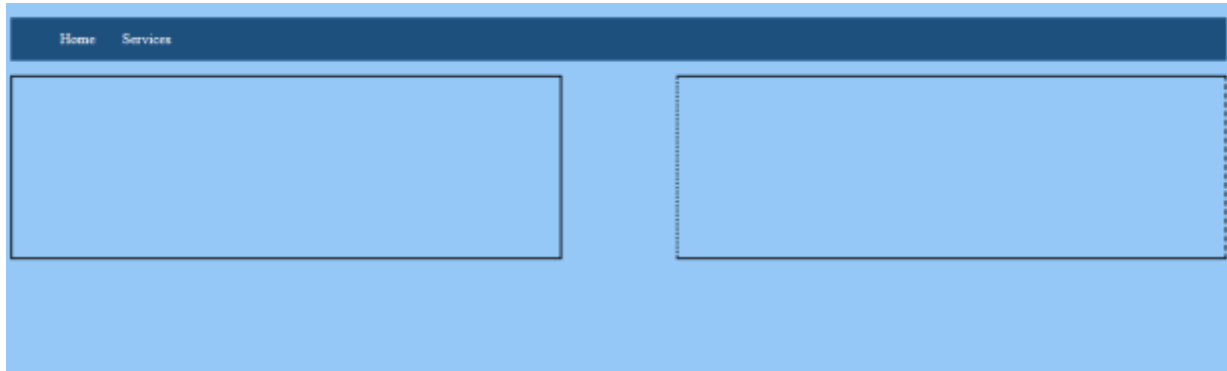   }

   The div will get a solid border:

We can define separate border styles for all four sides.

4. Create a second div in home page and give id="div2"

5. Apply border in its style sheet as:

   #div2{
   float:right;
   width:45%;
   height:200px;
   border-top-style:solid;
   border-left-style:dotted;
   border-right-style:dashed;
   border-bottom-style:double;
   border-width:2px;
   border-color::#092641;

<mark>}</mark>

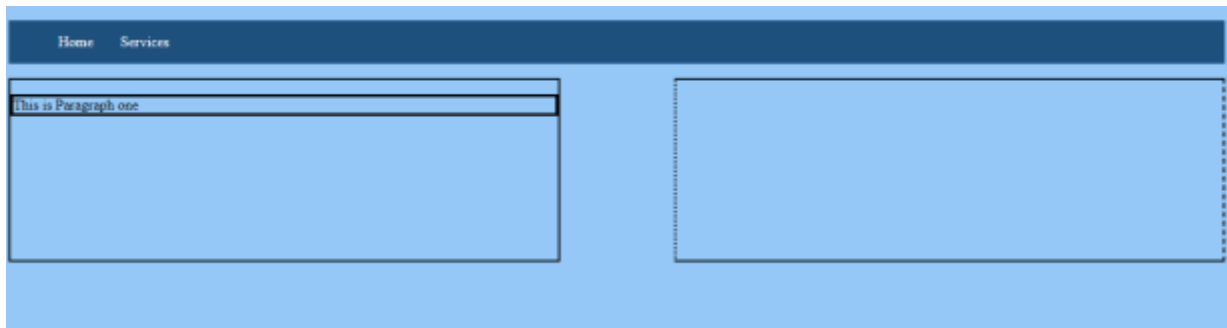This will add border in div 2:

3. Margin and Padding

Margin is space created around HTML element, outside of defined border.

1. In home page create a Paragraph inside div1 give id="p1" and create a border around it.

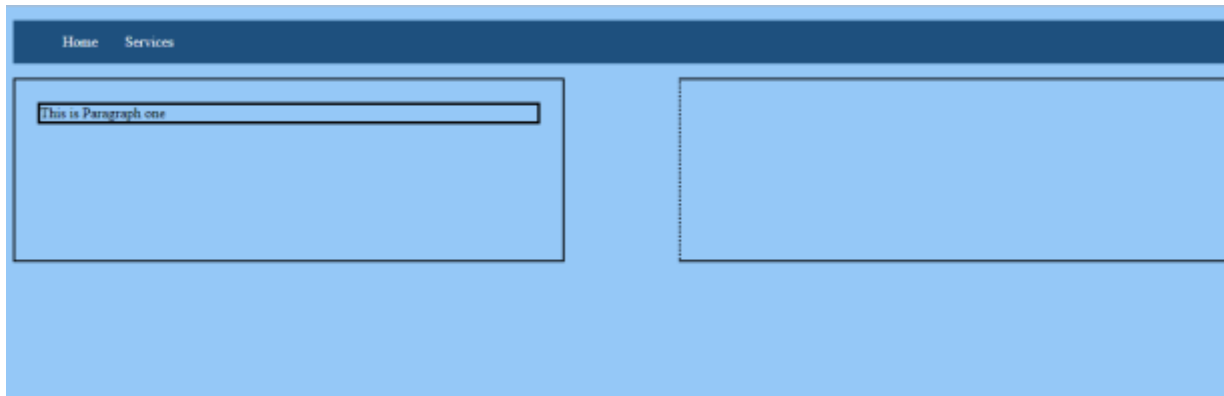   This will create a paragraph with border as:

2. Now add margin of 25px in its stylesheet.

   <mark>#p1{</mark>

   <mark>margin:25px;</mark>

   <mark>}</mark>

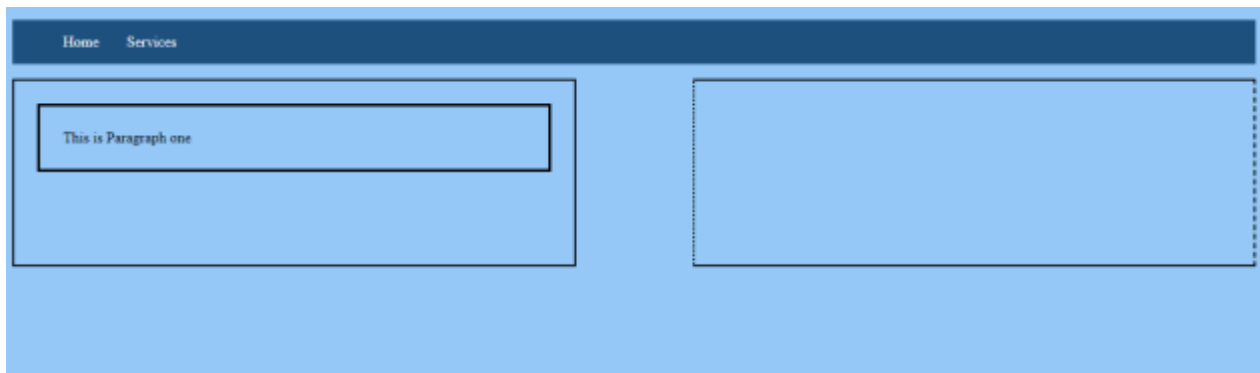This will add margin around Paragraph p1 outside its border.

Padding is space created around Element's content inside the defined border.

3. Now add Padding in paragraph p1 in stylesheet as:
   #p1{
   padding:25px;
   }

   This will create padding around content of paragraph inside borders.

   Observe the difference of Padding and Margin.

You can define padding and margins separately for all four sides by following properties:

    a. padding-top
    b. padding-bottom
    c. padding-left
    d. padding-right

     a. margin-top
     b. margin-bottom
     c. margin-left
     d. margin-right

4. Height and Width

Using properties of height and width we can set the size of HTML elements.

1. Add image in div 2 and give id="img1" inside home page.

2. Set width and height as following:

#img1{

width:50%;

height:50%;

}

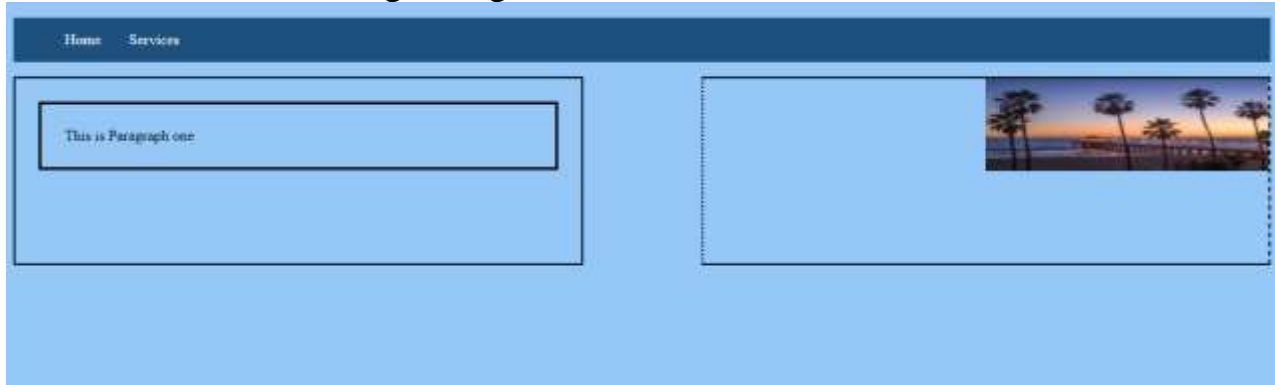This will set image width and height to 50% with respect to outside element.

Float

The float property defines floating of HTML element(left, right)

1. Float the above image to right as:
   #img1{
   Float:right;
   }

   This will float the image to right:

5. CSS Text Properties

We can add style to our text by using various properties. These properties applies to all tags that can contain text.

color   To set color of text

font-family To set font style of text

font-size   To set size of text

text-align   align text to   right, left, center

1. Create 4 paragraphs in home page outside of div as:

    <p id="text1">Hello</p>

    <p id="text2">World </p>

    <p id="text3">this</p>

    <p id="text4">is Some Text</p>

2. Now add style to each of above Paragraph as:
   #text1{
   color:red;
   }

   #text2{
   font-family:Times New Roman;
   }

   #text3{
   font-size:20px
   }

   #text4{
   text-align:center;
   }

6. Links

Links/Anchor can be styled differently.

We can give style to <a> by selecting all anchor tags, by id and by class.

There are some more styles we can give to <a>.

Links can be styled differently depending on what **state** they are in.

The four links states are:

- **a:link** - a normal, unvisited link
- **a:visited** - a link the user has visited
- **a:hover** - a link when the user mouses over it
- **a:active** - a link the moment it is clicked

7. Tables

We can style tables using CSS properties.

1. Create a table in services Page and give id="servicetable"

2. Make 5 rows and 2 columns. The code will be asfollows:

```
<table id="servicetable">
<tr><td>1.</tad>   <td>Service 1</tad></tr>
<tr><td>2.</tad>   <td>Service 2</tad></tr>
<tr><td>3.</tad>   <td>Service 3</tad></tr>
<tr><td>4.</tad>   <td>service 4</tad></tr>
<tr><td>5.</tad>   <td>Service 5</tad></tr>

</table>
```
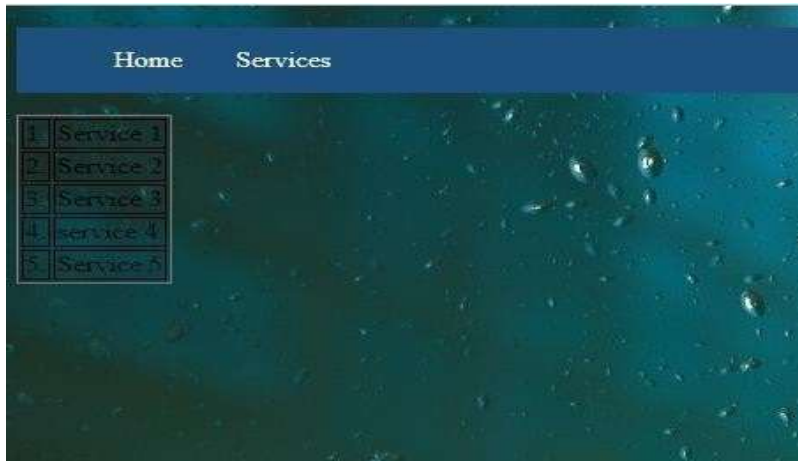
3. Now add border to table in style sheet.

```
#servicetable,td{

border-style:solid;
border-width:1px;

}
```

The table will be like following:

4. To make text visible change color to white.

5. Collapse border of table data and table as:

   table{
   border-collapse:collapse;
   }

6. Now set width and height of table.
   table{
   width:100%;
   height:200px;
   }

7. Now increase the size of text.
   table{
   font-size:30px;
   }

8. Now make table rows hoverable using following style properties:
   tr:hover{
   background-color:white;
   color:black;
   }
9. Now hover over the table rows, it will look more professional.

8. Opacity

Opacity defines the transparency of an HTML element.

1. Create a div in services page and give id="div1"

2. Set width to 100% and height to 200px and set background color to white.

3. Set opacity to 0.5 as:

```
#div1{
opacity:0.5;
}
```


Task 2

Add Heading 1 in black color inside the div created above. Align in to center and set size to 120px. Write "services" inside the heading.

Post Lab Assignment

1. Create a single static webpage.
2. Add navigation bar in it and style it using anchorstates.
3. Use 5-6 new html tags and 5-6 new CSS properties in Page.