Computer Workshop PRACTICALS

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ROLL NO. : 60

BRANCH : CSE

SEMESTER : 3rd

COLLEGE : Government College of Engineering , Nagpur

INDEX

Practical 1

Aim : Introduction to HTML, Web Pages, World Wide Web, Tags in HTML.

(PDF submitted on moodle)

Practical 2

Aim : Write a HTML code to generate the following output. Create an html page with following specifications a. Title should be about my college b. Put the image in the background c. Place your College name at the top of the page in large text followed by an address in smaller size d. Add names of courses offered each in a different color, style and typeface e. Add scrolling text with a message of your choice (Develop an HTML document for a web page using Character and Page formatting elements).

Theory :

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML consists of a series of elements
- HTML elements tell the browser how to display the content
- HTML elements label pieces of content such as "this is a heading", "this is a paragraph", "this is a link", etc.

Code :

*college - Notepad

File Edit Format View Help

```
<!DOCTYPE html>
<html>
<head>
<style>
img {
  width: 100%;
}
body{
  background-image: url('
CwKjrJqeeq7+PCd1TFM66+H9KSkn0FUdAd/jSj2+6kntPhSg9vuoGL40oP5g0k9opQ3aKQHQb8xXWbtFID3UFu7xpDFzd3jSzXObsn89tGvIUAdzRNcZTQEHKkAuekk8vGuqKA
dWXZ2vdO+7c/G31rh8e53u572b61nv7ZQekfwmnExpdcyMfOKmQOQPzNb3/wxcWvS3OIJ4nxJrhn7jVS+NKJmcsesF0A5E/KmG24vJ/blp2/gKN+l5n7D8alYB5dRz9lV2zGF1
x5uPd6xIUJGpIgzunnFXLjSsf0BYlr3db/51sX3U3p0a8SaikzGdLGbOkEjqHcSPSPKqnAgm7bknz0/iFXXSOxndOtEKeBM9Y8u6q7D4OHQ5ph19H7Q5mumHRMnstL5AZvvN8a
yj7vOb+I1s45UZpm+x7oUOQgjMNxBE+yoWAIFxZ7fgarthH/AAzf6x/gFTcCf1g7A3wNapVFozb/AJFuu2MMBHlLf4lqTs7FJcDMjBgCBI1ExMe+vKrbSWnma3nQcRZf/U/4is
FcbRhblhuEMvhH1pAWtnGi1ndgWULqBE9ZVGk8iZ9lcWtoKRImDrrE/GmcWJtXO20x8Fb+Ws9h2GX8/SnVgNW3OYd31ru4pJQD1vnXaIBryp+yRIHaPjXRJmZdYbzn9nzp5zUf
5FkyON0jbXcoOhHDjXQujmPEVUbK2LjUDXb6v5NhlVmdHGbNyDEjceFWoFOKpUDex1TUTa1nOFjeDPiKeC9pqv27cdbalGIOdQdx0IPMc4rl/wBjfwXDSN9T0NVGGuEjU686sb
eWYOM0kxmHPfpWcYLs0/RmbTYV0tb/UkAWwpPkwsMFjrD0zPpcd9SU2NeGgQxnB8xBoGBmYkd005Z6PtJHlVYrMjrEjvmo+LwllJzXFJB3AE6g7vj76coxW2wzZYPspyPN1G7V
R1yFjPkgZzACI8oI3e+peGw9sYeRdcqrrbMWhmzRI0z7oXnWobbthVDnJlK6gZQVYEAg6zrIjTgZO6qjHdL0KutoDNIKGAN3PXraiRwO4ikuTF2hNWqZVWjaDlg90yP2acwd+f
3SBoASN5gCpF6y79cwA5Jy6wCSRHzpUwuoAYBBrHBSeAJ1Osa8YqQ9/LpmBUnWOE76VoaiM2LMaAbolZ3g6ERz1q1tFQCV1YqEgcATJgcNNI+0aqmuZnzHe0EnX8ipeBsDPmYw
xpRhJFXEqlwILE+bHDNmB4wDvB7531f2trvG4aaUx+j2+RPfSpbtgQFAHIARQuNoLiel3Fka1julezE8opAglYMAa6nU9v0oord9GaMxc2YvM00+yF9Y+FLRUsoiXdlr2Tzyio
width="150" height="400"
background-repeat: no-repeat;
background-size: cover;
}
</style>
</head>
<body>
<h1 style="font-size:300%;text-align:center;">Government College of Engineering Nagpur</h1>
<p style="color:DarkSlateGrey;font-size:100%;text-align:center;"><strong>Government College of Engineering, Nagpur (GCOEN) Sector 27,
<p style="background-color:AliceBlue;font-size:120%;"><b>
```

Ln 21, Col 9 | 100% | Windows (CRLF) | UTF-8

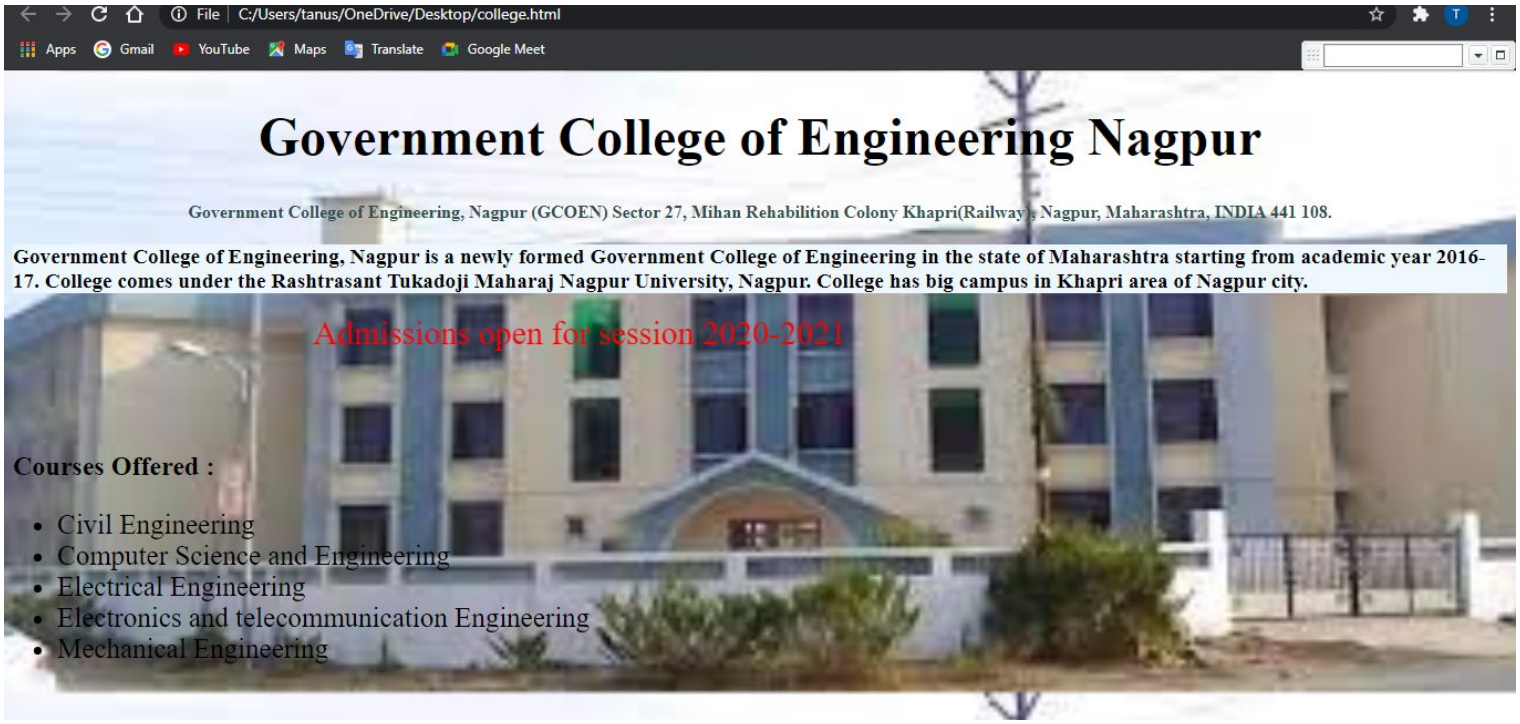
*college - Notepad

File Edit Format View Help

```
3SBoASN5gCpF6y79cwA5Jy6wCSRHzpUwuoAYBBrHBSeAJ1Osa8YqQ9/LpmBUnWOE76VoaiM2LMaAbolZ3g6ERz1q1tFQCV1YqEgcATJgcNNI+0aqmuZnzHe0EnX8ipeBsDPmYw
xpRhJFXEqlwILE+bHDNmB4wDvB7531f2trvG4aaUx+j2+RPfSpbtgQFAHIARQuNoLiel3Fka1julezE8opAglYMAa6nU9v0oord9GaMxc2YvM00+yF9Y+FLRUsoiXdlr2Tzyio
width="150" height="400"
background-repeat: no-repeat;
background-size: cover;
}
</style>
</head>
<body>
<h1 style="font-size:300%;text-align:center;">Government College of Engineering Nagpur</h1>
<p style="color:DarkSlateGrey;font-size:100%;text-align:center;"><strong>Government College of Engineering, Nagpur (GCOEN) Sector 27,
<p style="background-color:AliceBlue;font-size:120%;"><b>
Government College of Engineering, Nagpur is a newly formed Government College of Engineering in the state of Maharashtra starting fro
</b></p>
<marquee direction="right" height="100px" style="color:red;font-size:30px">
Admissions open for session 2020-2021
</marquee>
<h2>Courses Offered : </h2>
<ul style="font-size:25px">
  <li>Civil Engineering</li>
  <li>Computer Science and Engineering</li>
  <li>Electrical Engineering</li>
  <li>Electronics and telecommunication Engineering</li>
  <li>Mechanical Engineering</li>
</ul>
</body>
</html>
```

Ln 21, Col 9 | 100% | Windows (CRLF) | UTF-8

Output :



Practical 3

Aim : Develop an HTML document for a web page using Ordered, Unordered and Definition list. Design web page using attractive background color, text color and background image

Theory :

- ### Unordered HTML List

  An unordered list starts with the `<ul>` tag. Each list item starts with the `<li>` tag.

  The list items will be marked with bullets (small black circles) by default

- ### Ordered HTML List

  An ordered list starts with the `<ol>` tag. Each list item starts with the `<li>` tag.

  The list items will be marked with numbers by default

- ### HTML Description Lists

  HTML also supports description lists.

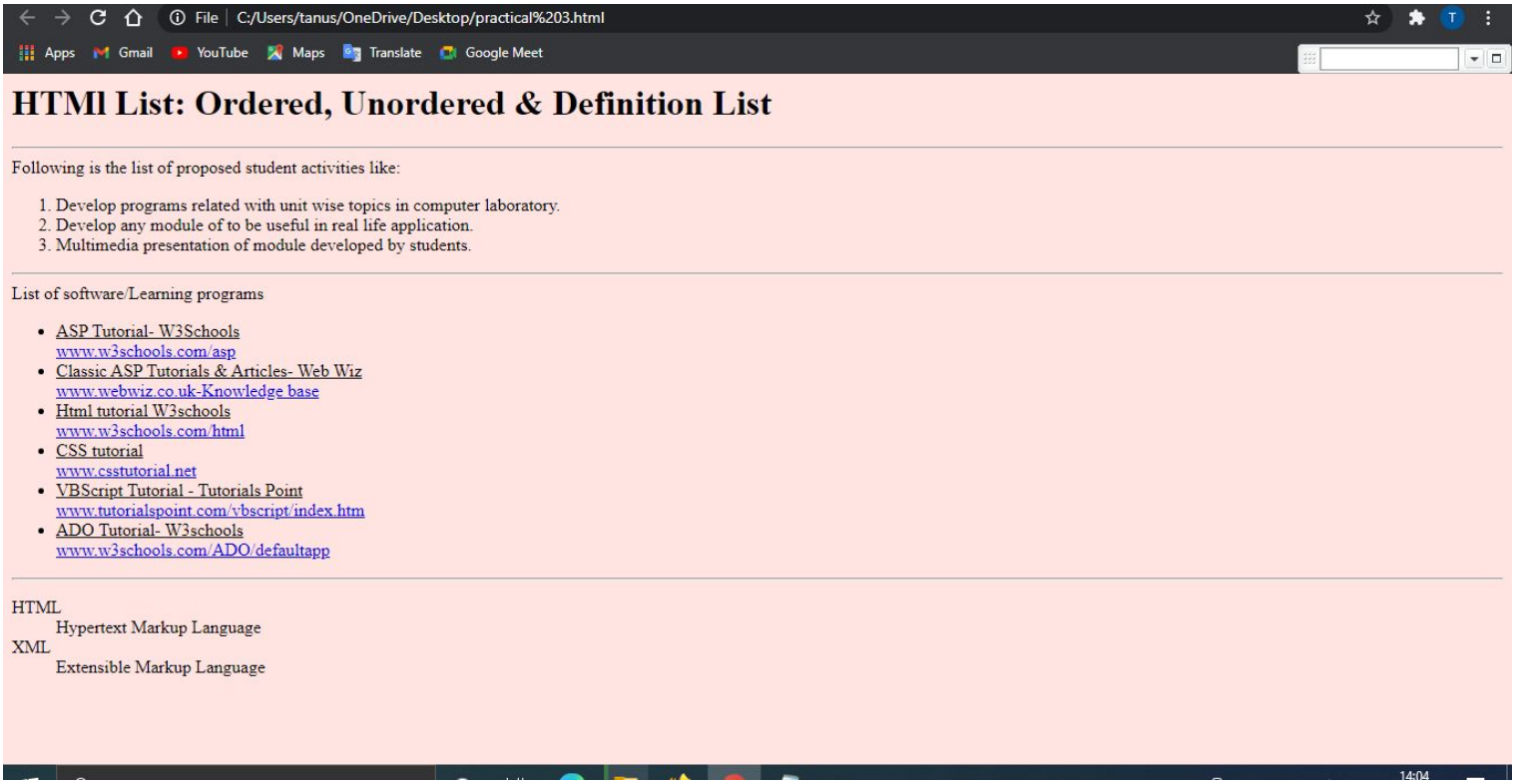
  A description list is a list of terms, with a description of each term.

The `<dl>` tag defines the description list, the `<dt>` tag defines the term (name), and the `<dd>` tag describes each term

Code :

```
<html>
<head>
<title>Lists</title>
</head>
<body bgcolor="MistyRose">
<h1>HTMl List: Ordered, Unordered & Definition List</h1>
<hr>
Following is the list of proposed student activities like:
<ol>
<li>Develop programs related with unit wise topics in computer laboratory.</li>
<li>Develop any module of to be useful in real life application.</li>
<li>Multimedia presentation of module developed by students.</li>
</ol>
<hr>
List of software/Learning programs
<ul>
<li><u>ASP Tutorial- W3Schools<br>
<a href="www.w3schools.com/asp">www.w3schools.com/asp</a></li>
<li>Classic ASP Tutorials & Articles- Web Wiz<br>
<a href="www.webwiz.co.uk">www.webwiz.co.uk-Knowledge base</a></li>
<li>Html tutorial W3schools<br>
<a href="www.w3schools.com/html">www.w3schools.com/html</a></li>
<li>CSS tutorial<br>
<a href="www.csstutorial.net">www.csstutorial.net</a></li>
<li>VBScript Tutorial - Tutorials Point<br>
<a href="www.tutorialspoint.com/vbscript/index.htm">www.tutorialspoint.com/vbscript/index.htm</a></li>
<li>ADO Tutorial- W3schools<br>
<a href="www.w3schools.com/ADO/defaultapp">www.w3schools.com/ADO/defaultapp</a></li></u>
</ul>
<hr>
<dl>
<dt>HTML</dt>
<dd>Hypertext Markup Language</dd>
<dt>XML</dt>
<dd>Extensible Markup Language</dd>
</dl>
</body>
</html>
```

Output :



Practical 4

Aim : Create a static web page using a complex table like mark sheet,telephone bill, time –table etc.

Theory :

- The `<table>` tag defines an HTML table.
- Each table row is defined with a `<tr>` tag. Each table header is defined with a `<th>` tag. Each table data/cell is defined with a `<td>` tag.
- By default, the text in `<th>` elements are bold and centered.
- By default, the text in `<td>` elements are regular and left-aligned.
- To add a border to a table, use the CSS `border` property
- To let the borders collapse into one border, add the CSS `border-collapse` property
- To make a cell span more than one column, use the `colspan` attribute
- To make a cell span more than one row, use the `rowspan` attribute
- To add a caption to a table, use the `<caption>` tag.Note: The `<caption>` tag must be inserted immediately after the `<table>` tag.

Code :

```
<html>
```

```
<head>
 <style>
  table{
        border: 1px solid black;
        border-collapse: collapse;
       }
  th,td{
        border: 1px solid black;
        padding: 10px;
        text-align="center";
       }
 </style>
</head>
<body font align="center">
<h1 font align="center">MANIPAL UNIVERSITY</h1>
<table style="width:100%" font align="center">
<caption>MARKSHEET</caption>
  <tr bgcolor="Orange">
    <th rowspan="3" width=100px>SUBJECT NAME</th>
    <th colspan="4" width=200px>INTERNAL ASSESSMENT</th>
    <th colspan="4" width=200px>EXTERNAL ASSESSMENT</th>
    <th rowspan="2" colspan="2" width=75px>TOTAL MARKS OBTAINED</th>
  </tr>
  <tr bgcolor="LightGray">
    <th colspan="2">PRACTICAL</th>
    <th colspan="2">THEORY</th>
    <th colspan="2">PRACTICAL</th>
    <th colspan="2">THEORY</th>
  </tr>
  <tr bgcolor="#FAFAD2">
    <th>obtained</th>
    <th>out of</th>
    <th>obtained</th>
    <th>out of</th>
    <th>obtained</th>
    <th>out of</th>
    <th>obtained</th>
    <th>out of</th>
    <th>obtained</th>
    <th>out of</th>
  </tr>
  <tr>
    <td bgcolor="#FAFAD2">DCFM</td>
    <td>20</td>
    <td>20</td>
    <td>16</td>
    <td>20</td>
    <td>18</td>
    <td>20</td>
    <td>75</td>
    <td>80</td>
    <td>93</td>
```

```
  <td>100</td>
 </tr>
 <tr>
  <td bgcolor="#FAFAD2">ACPL</td>
  <td>20</td>
  <td>20</td>
  <td>16</td>
  <td>20</td>
  <td>18</td>
  <td>20</td>
  <td>75</td>
  <td>80</td>
  <td>93</td>
  <td>100</td>
 </tr>
 <tr>
  <td bgcolor="#FAFAD2">MATHS</td>
  <td>20</td>
  <td>20</td>
  <td>16</td>
  <td>20</td>
  <td>18</td>
  <td>20</td>
  <td>75</td>
  <td>80</td>
  <td>93</td>
  <td>100</td>
 </tr>
 <tr>
  <td bgcolor="#FAFAD2">CAO</td>
  <td>20</td>
  <td>20</td>
  <td>16</td>
  <td>20</td>
  <td>18</td>
  <td>20</td>
  <td>75</td>
  <td>80</td>
  <td>93</td>
  <td>100</td>
 </tr>
 <tr>
 <th>Total Marks</th>
 <td colspan="8"></td>
 <td>378</td>
 <td>400</td>
 </tr>
</table>
</body>
</html>
```

Output :

MANIPAL UNIVERSITY

MARKSHEET

SUBJECT NAME	INTERNAL ASSESSMENT				EXTERNAL ASSESSMENT				TOTAL MARKS OBTAINED	
	PRACTICAL		THEORY		PRACTICAL		THEORY			
	obtained	out of	obtained	out of	obtained	out of	obtained	out of	obtained	out of
DCFM	20	20	16	20	18	20	75	80	93	100
ACPL	20	20	16	20	18	20	75	80	93	100
MATHS	20	20	16	20	18	20	75	80	93	100
CAO	20	20	16	20	18	20	75	80	93	100
Total Marks									378	400

Practical 5

Aim : Create a static web page which defines all text formatting tags of HTML in tabular format

Theory :

HTML contains several elements for defining text with a special meaning. :

- The HTML `<b>` element defines bold text, without any extra importance.
- The HTML `<strong>` element defines text with strong importance. The content inside is typically displayed in bold.
- The HTML `<i>` element defines a part of text in an alternate voice or mood. The content inside is typically displayed in italic.
- The HTML `<small>` element defines smaller text.
- The HTML `<mark>` element defines text that should be marked or highlighted.
- The HTML `<del>` element defines text that has been deleted from a document. Browsers will usually strike a line through deleted text.
- The HTML `<ins>` element defines a text that has been inserted into a document. Browsers will usually underline inserted text.
- The HTML `<sub>` element defines subscript text. Subscript text appears half a character below the normal line, and is sometimes rendered in a smaller font. Subscript text can be used for chemical formulas, like H_2O.
- The HTML `<sup>` element defines superscript text. Superscript text appears half a character above the normal line, and is sometimes rendered in a smaller font. Superscript text can be used for footnotes.

Code :

```
<html>
<head>
    <title>Practical5</title>
    <style>
        h1{
            color: red;
            text-align: center;
        }
        table{
            text-align: center;
            margin-left: auto;
            margin-right: auto;
        }
    </style>
</head>
<body>

        <h1>Text Formatting Tags</h1>
        <table border="1">
            <tr>
                <th>
                    HTML Tags
                </th>
                <th>
                    Output
                </th>
            </tr>
```

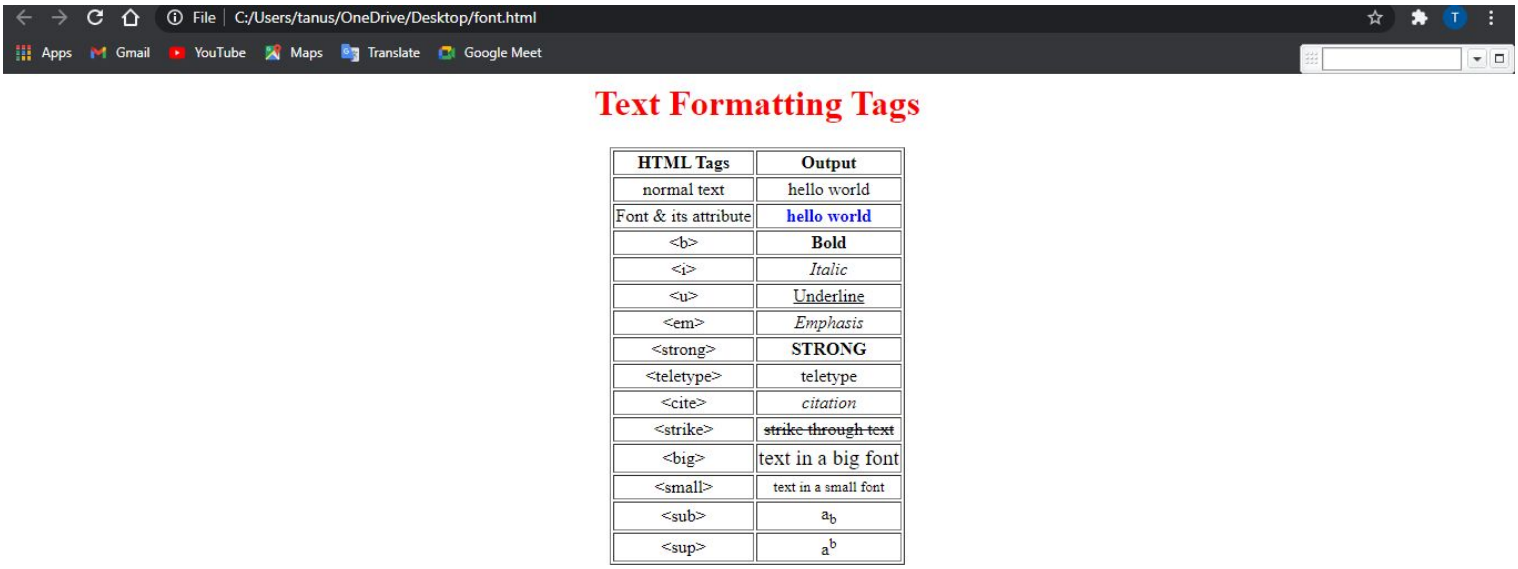
```
<tr>
    <td>
        normal text
    </td>
    <td>
        hello world
    </td>
</tr>
<tr>
    <td>
        Font & its attribute
    </td>
    <td><strong><font color="blue">hello world</font></strong></td>
</tr>
<tr>
    <td>
        &lt;b&gt;
    </td>
    <td>
        <b>Bold</b>
    </td>
</tr>
<tr>
    <td>
        &lt;i&gt;
    </td>
    <td>
        <i>Italic</i>
    </td>
```

```
</tr>
<tr>
    <td>
        &lt;u&gt;
    </td>
    <td>
        <u>Underline</u>
    </td>
</tr>
<tr>
    <td>
        &lt;em&gt;
    </td>
    <td>
        <em>Emphasis</em>
    </td>
</tr>
<tr>
    <td>
        &lt;strong&gt;
    </td>
    <td>
        <strong>STRONG</strong>
    </td>
</tr>
<tr>
    <td>
        &lt;teletype&gt;
    </td>
```

```
    <td>
        <teletype>teletype</teletype>
    </td>
</tr>
<tr>
    <td>
        &lt;cite&gt;
    </td>
    <td>
        <cite>citation</cite>
    </td>
</tr>
<tr>
    <td>
        &lt;strike&gt;
    </td>
    <td>
        <strike>strike through text</strike>
    </td>
</tr>
<tr>
    <td>
        &lt;big&gt;
    </td>
    <td>
        <big>text in a big font</big>
    </td>
</tr>
<tr>
```

```
            <td>
                &lt;small&gt;
            </td>
            <td>
                <small>text in a small font</small>
            </td>
        </tr>
        <tr>
            <td>
                &lt;sub&gt;
            </td>
            <td>
                a<sub>b</sub>
            </td>
            <tr>
                <td>
                    &lt;sup&gt;
                </td>
                <td>
                    a<sup>b</sup>
                </td>
            </tr>
        </tr>
    </table>
</body>
</html>
```

Output :



Practical 6

Aim : Develop a complete web page using Frames and Frameset which gives the information about college.

Theory :

HTML frames are used to divide your browser window into multiple sections where each section can load a separate HTML document. A collection of frames in the browser window is known as a frameset. The window is divided into frames in a similar way the tables are organized: into rows and columns.

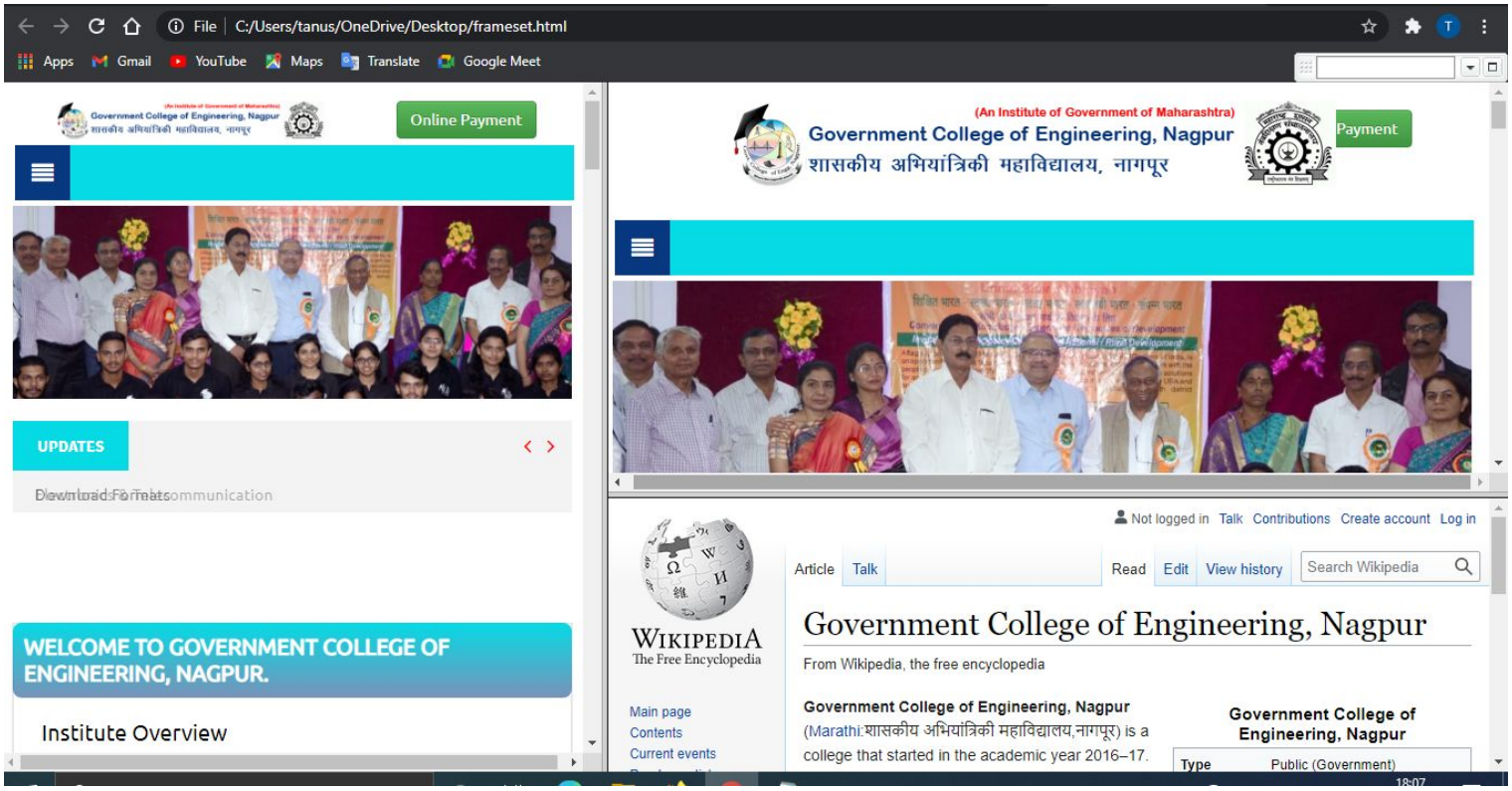
To use frames on a page we use <frameset> tag instead of <body> tag. The <frameset> tag defines how to divide the window into frames. The **rows** attribute of <frameset> tag defines horizontal frames and **cols** attribute defines vertical frames. Each frame is indicated by a <frame> tag and it defines which HTML document shall open into the frame.

Code :

```
<html>
<head>
<title>My College</title>
</head>
<frameset>
<frameset cols="40%,*">
<frame src="http://www.gcoen.ac.in/" name="f1">
<frameset rows="60%,*">
<frame src="http://www.gcoen.ac.in/" name="f2">
<frame src="https://en.wikipedia.org/wiki/Government_College_of_Engineering,_Nagpur" name="f3">
```

</frameset>
</frameset>
</html>

Output :



Practical 7

Aim : Create an employee registration webpage using HTML form objects.

Theory :

An HTML form is used to collect user input. The user input is most often sent to a server for processing.

The HTML `<form>` element is used to create an HTML form for user input. The `<form>` element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

The HTML `<input>` element is the most used form element.

An `<input>` element can be displayed in many ways, depending on the `type` attribute.

Here are some examples:

Type	Description
<input type="text">	Displays a single-line text input field
<input type="radio">	Displays a radio button (for selecting one of many choices)
<input type="checkbox">	Displays a checkbox (for selecting zero or more of many choices)
<input type="submit">	Displays a submit button (for submitting the form)
<input type="button">	Displays a clickable button

The `<input type="text">` defines a single-line input field for text input.

Notice the use of the `<label>` element in the example above.

The `<label>` tag defines a label for many form elements.

The `<label>` element is useful for screen-reader users, because the screen-reader will read out loud the label when the user focus on the input element.

The `<label>` element also help users who have difficulty clicking on very small regions (such as radio buttons or checkboxes) - because when the user clicks the text within the `<label>` element, it toggles the radio button/checkbox.

The `for` attribute of the `<label>` tag should be equal to the `id` attribute of the `<input>` element to bind them together.

The `<input type="radio">` defines a radio button.

Radio buttons let a user select ONE of a limited number of choices.

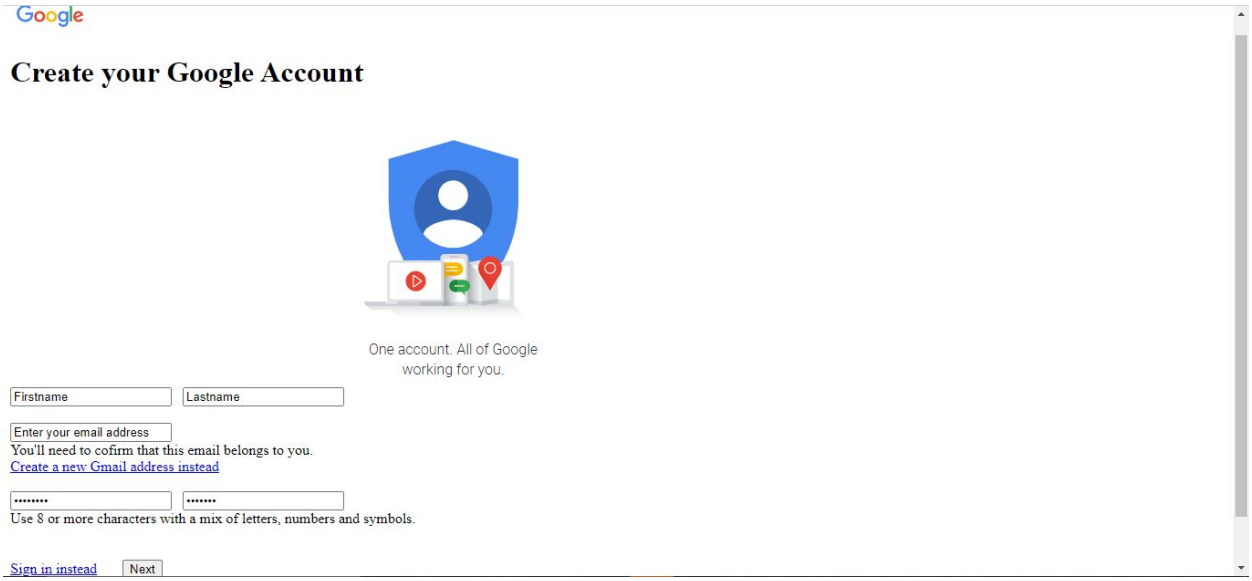
Code :

```
<html>
  <head>
    <title>
```

```
        Forms
    </title>
    <body>
        <img src="C:\Users\Ayona\Desktop\etc\google1.PNG">
        <h1>
            Create your Google Account
        </h1>
        <form>
            <label for="fname"></label>
            <input type="text" id="fname" name="fname" value="Firstname">  
            <label for="lname"></label>
            <input type="text" id="lname" name="lname" value="Lastname"><img
src="C:\Users\Ayona\Desktop\etc\google2.PNG"><br><br>
            <label for="email address"></label>
            <input type="text" id="email address" name="email address" value="Enter your
email address"><br>
            You'll need to confirm that this email belongs to you.<br>
            <a href="www.google.com">Create a new Gmail address instead</a><br><br>
            <label for="pass"></label>
            <input type="password" id="pass" name="pass"
value="Password">  
            <label for="cpass"></label>
            <input type="password" id="cpass" name="cpass" value="Confirm"><br>
            Use 8 or more characters with a mix of letters, numbers and
symbols.<br><br><br>
            <a href="www.google.com">Sign in
instead</a>      
            <input type="submit" value="Next"><br><br>
            <select name="Lang">
                <option value="Eng">English</option>
```

```
                <option value="Hin">Hindi</option>
                <option value="Fre">French</option>
                <option value="Ger">German</option>
            </select>
        </form>
    </body>
  </head>
</html>
```

Output :



Practical 8

Aim : Build technical documentation page using using HTML

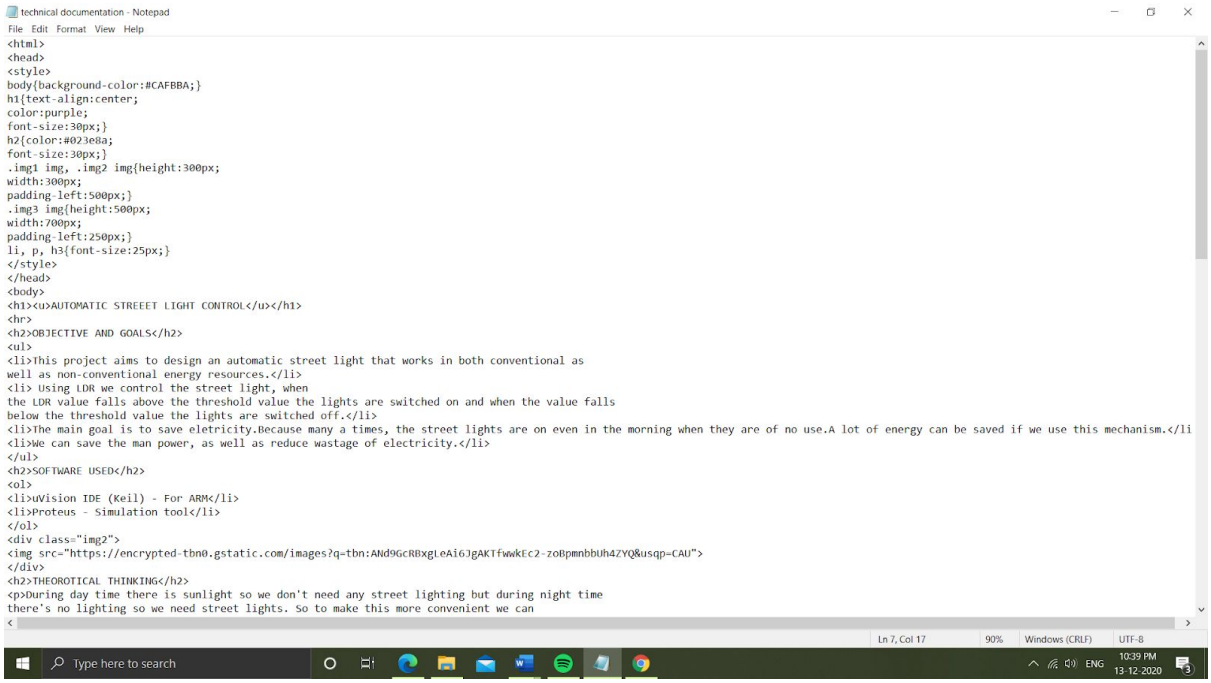
Theory :

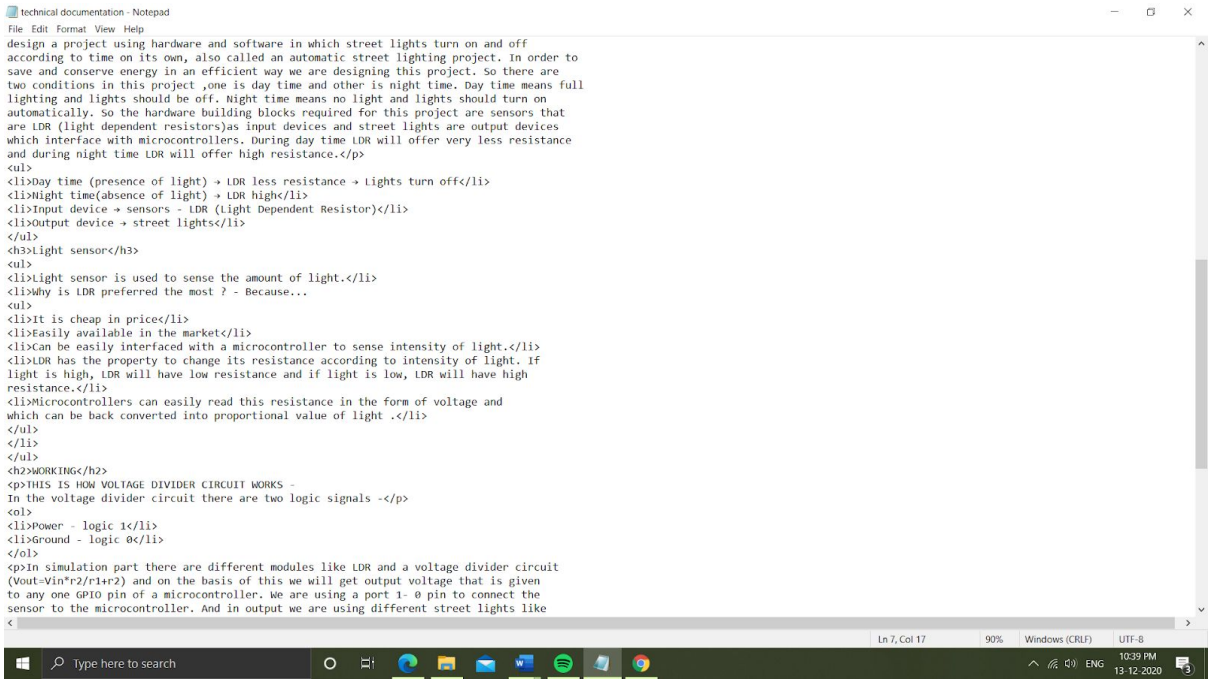
Technical documentation refers to any **document** that explains the use, functionality, creation, or architecture of a product. Think of it as a nuts-and-bolts “how to” guide for your users, new hires, administrators, and anyone else who needs to know how your product works.

Technical documents include memos, graphics, letters, fliers, reports, newsletters, presentations, web pages, brochures, proposals, instructions, reviews, press releases,

catalogs, advertisements, handbooks, business plans, policies and procedures, specifications, instructions, style guides, agendas and so forth.

Code :





technical documentation - Notepad

File Edit Format View Help

```
which can be back converted into proportional value of light .</li>
</ul>
</li>
</ul>
<h2>WORKING</h2>
<p>THIS IS HOW VOLTAGE DIVIDER CIRCUIT WORKS -
In the voltage divider circuit there are two logic signals -</p>
<ol>
<li>Power - logic 1</li>
<li>Ground - logic 0</li>
</ol>
<p>In simulation part there are different modules like LDR and a voltage divider circuit
(Vout=Vin*r2/r1+r2) and on the basis of this we will get output voltage that is given
to any one GPIO pin of a microcontroller. We are using a port 1- 0 pin to connect the
sensor to the microcontroller. And in output we are using different street lights like
Port 2- 0 to Port 2- 7 pins for interfacing street lights.
During night time there is no light on LDR so it offers very high resistance and if
there is light then resistance will be less.So in this case 0 logic is connected to the
microcontroller. And in day time due to less resistance, input to the microcontroller
will be 1.So whenever input is 0 we need output as 1 and vice versa.</p>
<h2>CODE</h2>
<p>
#include<reg51.h><br>
#define street_light P2<br>
sbit light_sensor=P1^0;<br>
void main(void)<br>
{<br>
while(1)<br>
{<br>
if (light_sensor==0)<br>
{<br>
street_light = 0XFF;<br>
}<br>
else<br>
{<br>
street_light = 0X00;<br>
}<br>
}<br>
}<br>
</p>
</body>
</html>
```

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Output :

technical documentation.html

File | C:/Users/ISHIKA/Documents/Html/technical%20documentation.html

AUTOMATIC STREEET LIGHT CONTROL

OBJECTIVE AND GOALS

- This project aims to design an automatic street light that works in both conventional as well as non-conventional energy resources.
- Using LDR we control the street light, when the LDR value falls above the threshold value the lights are switched on and when the value falls below the threshold value the lights are switched off.
- The main goal is to save eletricity.Because many a times, the street lights are on even in the morning when they are of no use.A lot of energy can be saved if we use this mechanism.
- We can save the man power, as well as reduce wastage of electricity.

SOFTWARE USED

1. uVision IDE (Keil) - For ARM
2. Proteus - Simulation tool

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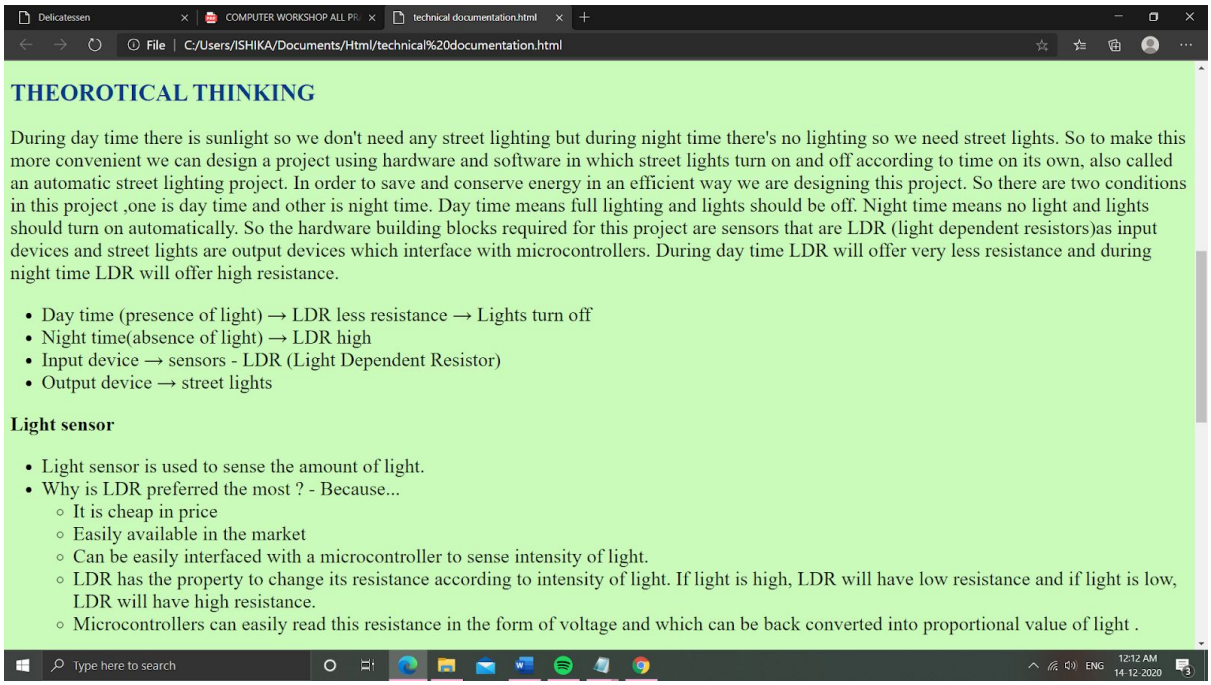


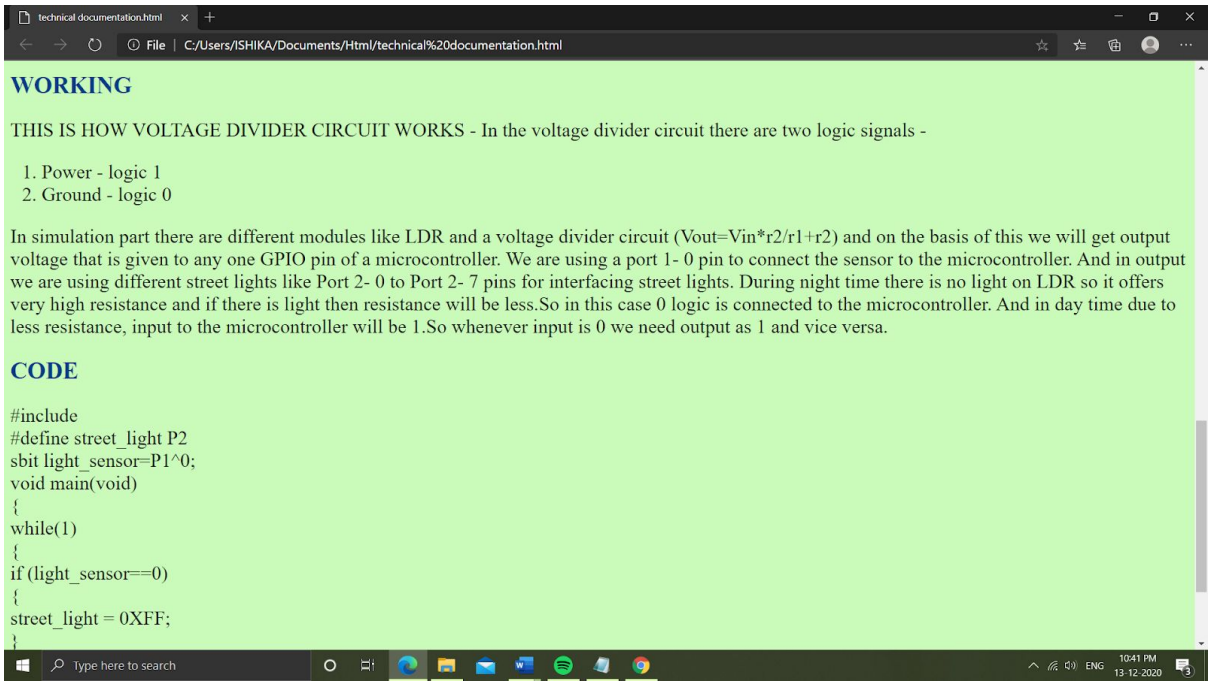
THEOROTICAL THINKING

During day time there is sunlight so we don't need any street lighting but during night time there's no lighting so we need street lights. So to make this more convenient we can design a project using hardware and software in which street lights turn on and off according to time on its own, also called an automatic street lighting project. In order to save and conserve energy in an efficient way we are designing this project. So there are two conditions in this project ,one is day time and other is night time. Day time means full lighting and lights should be off. Night time means no light and lights should turn on automatically. So the hardware building blocks required for this project are sensors that are LDR (light dependent resistors)as input devices and street lights are output devices which interface with microcontrollers. During day time LDR will offer very less resistance and during night time LDR will offer high resistance.

- Day time (presence of light) → LDR less resistance → Lights turn off
- Night time(absence of light) → LDR high
- Input device → sensors - LDR (Light Dependent Resistor)
- Output device → street lights

Light sensor

- Light sensor is used to sense the amount of light.
- Why is LDR preferred the most ? - Because...
  - It is cheap in price
  - Easily available in the market
  - Can be easily interfaced with a microcontroller to sense intensity of light.
  - LDR has the property to change its resistance according to intensity of light. If light is high, LDR will have low resistance and if light is low, LDR will have high resistance.
  - Microcontrollers can easily read this resistance in the form of voltage and which can be back converted into proportional value of light .



WORKING

THIS IS HOW VOLTAGE DIVIDER CIRCUIT WORKS - In the voltage divider circuit there are two logic signals -

1. Power - logic 1
2. Ground - logic 0

In simulation part there are different modules like LDR and a voltage divider circuit (Vout=Vin*r2/r1+r2) and on the basis of this we will get output voltage that is given to any one GPIO pin of a microcontroller. We are using a port 1- 0 pin to connect the sensor to the microcontroller. And in output we are using different street lights like Port 2- 0 to Port 2- 7 pins for interfacing street lights. During night time there is no light on LDR so it offers very high resistance and if there is light then resistance will be less.So in this case 0 logic is connected to the microcontroller. And in day time due to less resistance, input to the microcontroller will be 1.So whenever input is 0 we need output as 1 and vice versa.

CODE

```
#include
#define street_light P2
sbit light_sensor=P1^0;
void main(void)
{
while(1)
{
if (light_sensor==0)
{
street_light = 0XFF;
}
```

Practical 9

Aim : Apply style sheet on the Web page. [inline, embedded and linked]

Theory :

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more!

CSS can be added to HTML documents in 3 ways:

Inline - by using the `style` attribute inside HTML elementsAn inline CSS is used to apply a unique style to a single HTML element. An inline CSS uses the `style` attribute of an HTML element.

Internal - by using a `<style>` element in the `<head>` section.An internal CSS is used to define a style for a single HTML page. An internal CSS is defined in the `<head>` section of an HTML page,within a `<style>` element.

External - by using a `<link>` element to link to an external CSS file.The most common way to add CSS, is to keep the styles in external CSS files. However, in this tutorial we will use inline and internal styles, because this is easier to demonstrate, and easier for you to try it yourself.

Code :

ext.css

```
hr

{

color:sienna;

}

p

{

margin-left:20px;

}

body

{

background-image:url(“sheet.jpg”);

}
```

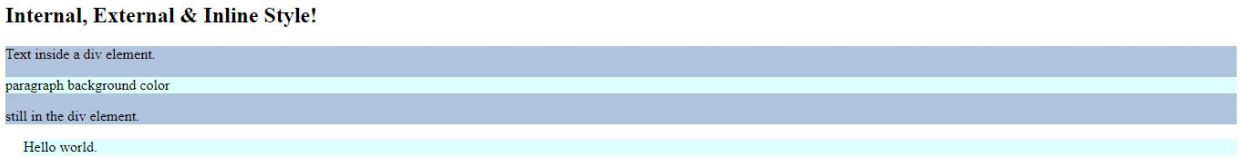
stylesheet.html

```
<html>

<head>
```

```
<link rel=”stylesheet” type=”text/css” href=”ext.css”>
<style>
h1
{
background-color:#6495ed;
}
p
{
background-color:#e0ffff;
}
div
{
background-color:#b0c4de;
}
</style>
</head>
<body>
<h2>Internal, External & Inline Style!</h1>
<div>Text inside a div element.
<p>paragraph background color</p>
still in the div element.
</div>
<p style=”color:red;margin-left:20px;”>Hello world.</p>
</body>
</html>
```

Output :



Practical 10

Aim : Create a business website using HTML and CSS.

Theory :

- **CSS** stands for **C**ascading **S**tyle **S**heets

- CSS describes **how HTML elements are to be displayed on screen, paper, or in other media**

- CSS **saves a lot of work**. It can control the layout of multiple web pages all at once

- External stylesheets are stored in **CSS files**

- CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

- The style definitions are normally saved in external .css files.

- With an external stylesheet file, you can change the look of an entire website by changing just one file!

- A CSS rule-set consists of a selector and a declaration block. The selector points to the HTML element you want to style.The declaration block contains one or more declarations separated by semicolons. Each declaration includes a CSS property name and a value, separated by a colon.Multiple CSS declarations are separated with semicolons, and declaration blocks are surrounded by curly braces.

Code :

web - Notepad

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```
<p class="4"><a href="file:///C:/Users/tanushree/Documents/Html/contact.html"><big><font color="DarkSlateGrey">Contact</big></font></a
<h1 class="sansserif" style="background-color:Lavender;"><font color="DarkSlateGrey">Cake Shop<font></h1>
<hr>
<img src="
cy0KCBr1XuQSvtBVuLgdTcAfOBycFhVdKzszKaNJKgAAObNVp07G5Fvbv6ToY7ZihA6aZcLg6jpxG7VgQSrE+8OXKx9JHtTZ9TBuMtRXp4iiHSqnsVEJDcm5EMqm3MEKe0qNtC
GJOIYgLnD1cTWAIp0x7GFwyNe7NbUqPxHroJR5HSp3sFBJNgANSb6AADnNJtPwjXw9Le1DS4VRmRXJqKrEKGZbWtmIBIJ1nQ8IImK2m1ZUsi1KuJC2Fl14AbaA5mU/ESPxPtem
4DbaxK0VTCUXuMPUNSpUQ+3ibWZkYa5UHAp/3HrOl9n+2Ep401cRUtnw9RA9RmbjJQrmc3NrKwuZkQloQEaHpXgbFK2MTD0WL0MNRr1nqFcpr1mCo9Ug+yvHlUcwL35zlYPadX
G+ztSCK7Wq2JCi9grDha2huNe4nC8V+D3wfGpapSDBGdlylWa+W4BIKm1r9+g0nsy0yKhqHUFVUC2qi9zrz1P0lbamzfvFCtRqarUHA17cuJL291h6icOO5S9293O2erOpOp+
xZ1u6WKlRnAObK5Fw2lxzsBNBt/YrV0z5f4lOmxDKLmqFAsjLfRgAdRe9+XQcuLO777d+TjmumN3ixCqJXYWuCLEGxB0IPYxrz0vMtCuILVhK8e0CXext7IrRrQJd4JUruMx9P
Drr6fHM+om6wfhWo9EpWZwWcsjXFlAvlLLyJsdR8rTC4rDvTd6bWzU6j0zbldSQbHtpPXx25Tt5OTGY3ovUR7+cgIaELzenPaXN5xZz3kfF5Qrt5fKNGzlz5SuxMmCtAYN2iw2
qkC7i1yFuMi8vMtz/AJZm4433G8csp6ehbMxVc2+81SUJCugsvBci4bNyNh20M5W0KabxyhLI1RmUnU2JvqepF7X8pyNm4NS2rPVUAk5mYLpdhYA63GT5n07CqLachN8ckt0nL
1koEFlliVBliCyS0ICbY2iKQlSGRCEARTENU8ohJBCaCBJAIgscQpWg2kl4JHWVKErBZJIBeIiEQGnBenLNoikaFPdCGlGWQklCS6ENOiJdpJaCiSZZRMPKSLAUQlMoPLeLL6R
<h1 class="sansserif" style="background-color:Lavender;"><font color="SlateBlue">Welcome to The Cake Shop<font></h1>
<a href="file:///C:/Users/tanushree/Documents/Html/menu.html"><big><center><font color="Purple">Click Here to view our Menu</center></
<div class="row">
  <div class="column">
    <img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQ9I4rn6d_wweHwpum8ENpDoEUAdoRSFx122w&usqp=CAU" alt="cake rack" sty
  </div>
  <div class="column">
    <img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcRIsfyKrwhdIbVBrOR844b15cpIatJfCubd8w&usqp=CAU" alt="cakes" style="
  </div>
  <div class="column">
    <img src="https://encrypted-tbn0.gstatic.com/images?q=tbn:ANd9GcQciB_1e2CHKXBxEQ9dIRd8M_VDZGVHE4JvMQ&usqp=CAU" alt="cupcakes" styl
  </div>
</div>
<hr>
</body>
</html>
```

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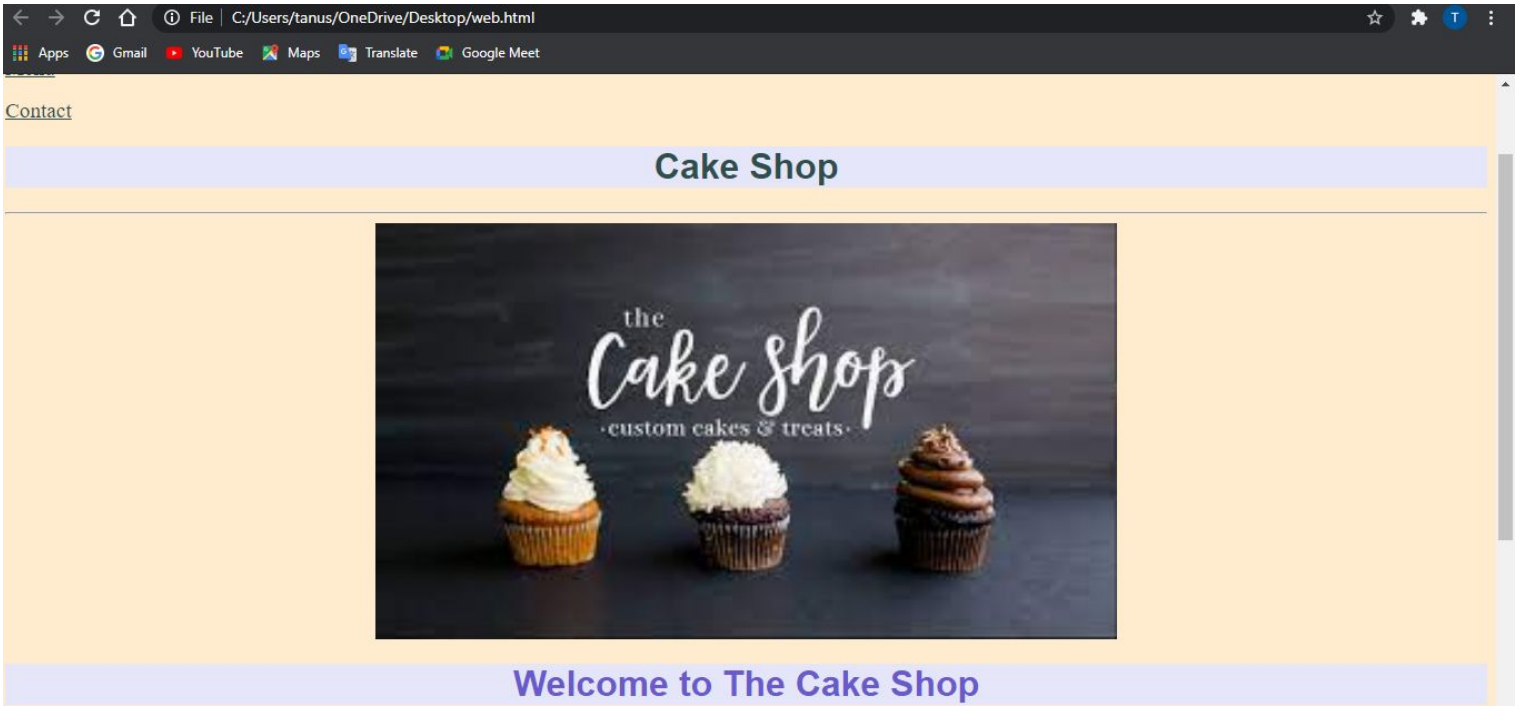
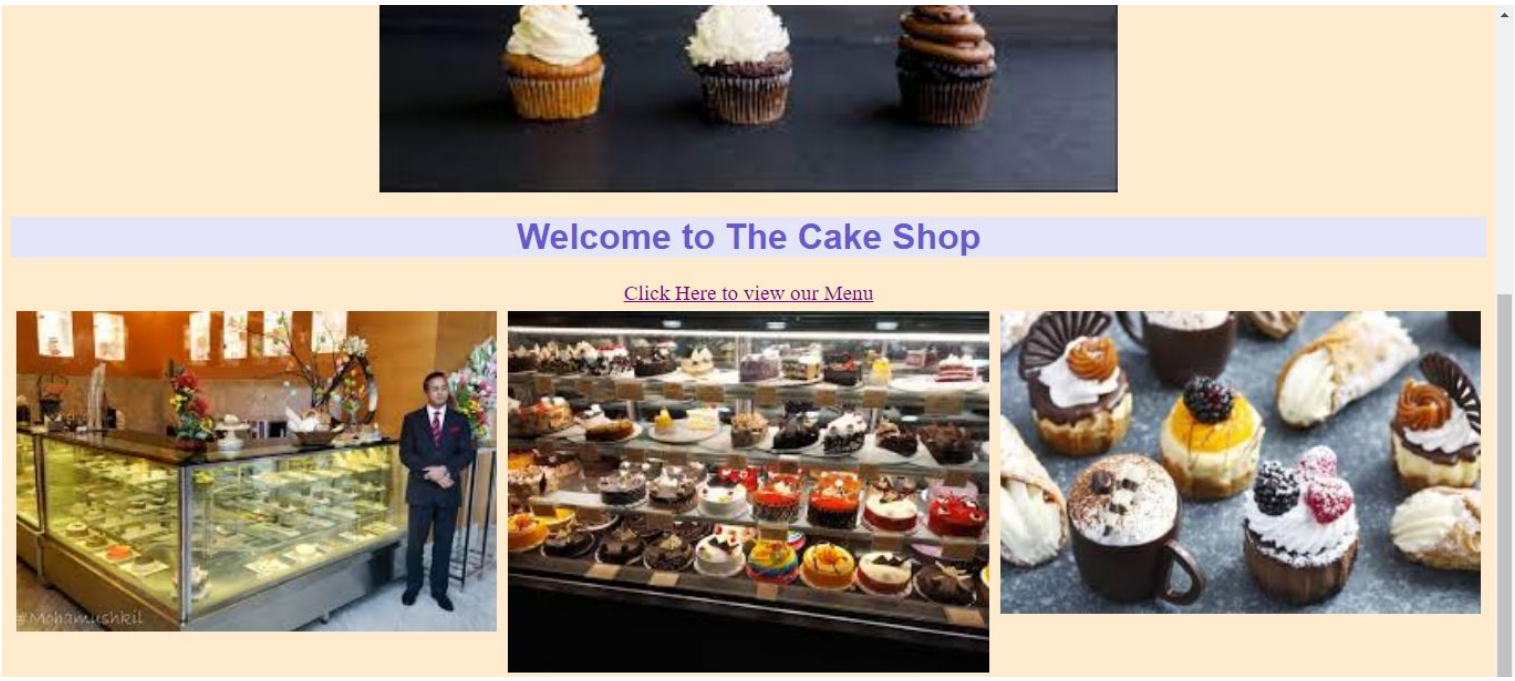
Output :





Practical 12

Aim : Create a HTML web page using Javascript.

Theory :

JavaScript (js) is a light-weight object-oriented programming language which is used by several websites for scripting the webpages. It is an interpreted, full-fledged programming language that enables dynamic interactivity on websites when applied to an HTML document. It was introduced in the year 1995 for adding programs to the webpages in the Netscape Navigator browser. Since then, it has been adopted by all other graphical web browsers. With JavaScript, users can build modern web applications to interact directly without reloading the page every time. The traditional website uses js to provide several forms of interactivity and simplicity.

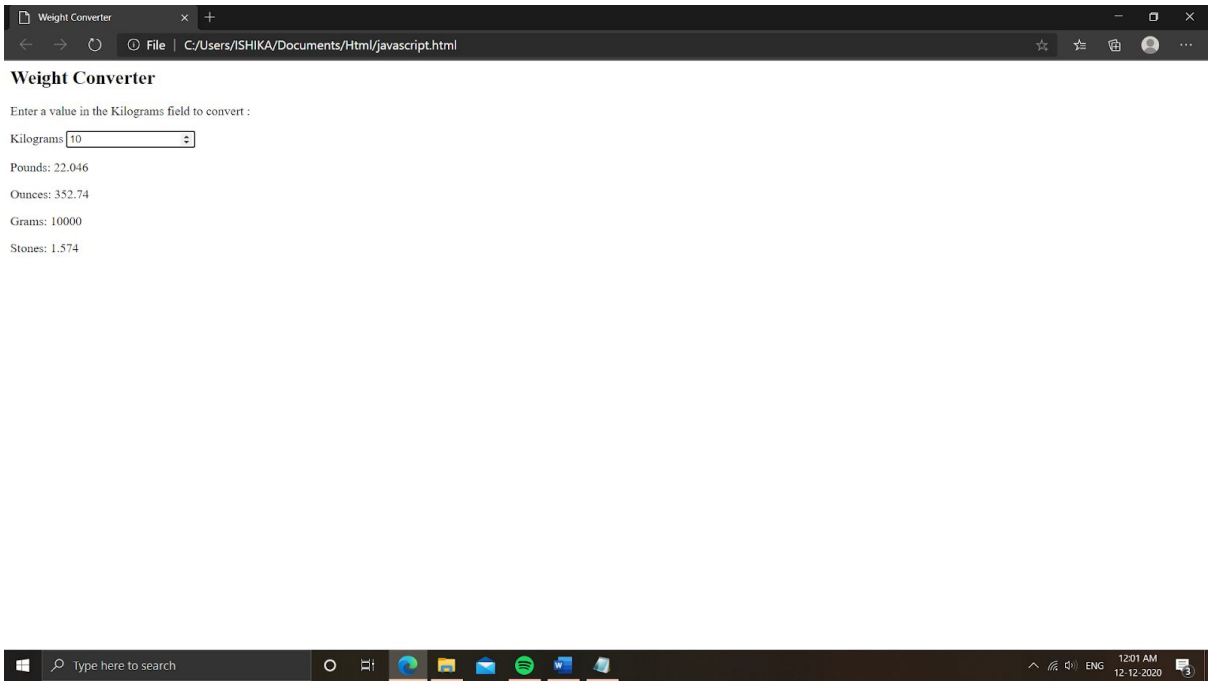
Although, JavaScript has no connectivity with Java programming language. The name was suggested and provided in the times when Java was gaining popularity in the market. In addition to web browsers, databases such as CouchDB and MongoDB uses JavaScript as their scripting and query language.

- JavaScript makes HTML pages more dynamic and interactive.
- The HTML `<script>` tag is used to define a client-side script (JavaScript).
- The `<script>` element either contains script statements, or it points to an external script file through the `src` attribute.
- Common uses for JavaScript are image manipulation, form validation, and dynamic changes of content.
- To select an HTML element, JavaScript most often uses the `document.getElementById()` method.
- The HTML `<noscript>` tag defines an alternate content to be displayed to users that have disabled scripts in their browser or have a browser that doesn't support scripts

Code :

```
<html>

<head>

<title>Weight Converter</title>

</head>

<body>

<h2>Weight Converter</h2>

<p>Enter a value in the Kilograms field to convert :</p>

<p>

<label>Kilograms</label>

<input id="Kilograms"  type="number"  placeholder="kilograms"  oninput="kiloweightConvert(this.value)" onchange="kiloweightConvert(this.value)" />

</p>

<p>Pounds: <span id="Pounds"></span></p>

<p>Ounces: <span id="Ounces"></span></p>

<p>Grams: <span id="Grams"></span></p>

<p>Stones: <span id="Stones"></span></p>

<script>

function kiloweightConvert(value)

{

document.getElementById("Pounds").innerHTML = value * 2.2046;

document.getElementById("Ounces").innerHTML = value * 35.274;

document.getElementById("Grams").innerHTML = value * 1000;

document.getElementById("Stones").innerHTML = value * 0.1574;

}

</script>

</body>

</html>
```

Output :


Weight Converter
File | C:/Users/ISHIKA/Documents/Html/javascript.html
Weight Converter
Enter a value in the Kilograms field to convert :
Kilograms 10
Pounds: 22.046
Ounces: 352.74
Grams: 10000
Stones: 1.574
Type here to search
ENG
12:01 AM
12-12-2020