WEB TECHNOLOGIES

 Write a program using basic such as heading tag, div tag, bold tag, italic tag, underline tag, break tag, small tag, big tag, typewriter, preformatted tag, subscript tag, superscript tag, blockquote tag, address tag.

```
2. < !DOCTYPE html>
3. <html lang="en">
4. <head>
5.
       <meta charset="UTF-8">
6.
       <meta name="viewport" content="width=device-width, initial-</pre>
  scale=1.0">
       <title>Basic Tags in HTML</title>
8.
       <style>
9.
           /* Styling for the heading */
10.
           body{
11.
               background-color: black;
12.
13.
           h1 {
14.
               text-align: center;
               color: #ff6600; /* Orange color */
15.
16.
               font-family: Arial, sans-serif;
17.
               text-shadow: 2px 2px 4px rgba(0, 0, 0, 0.2);
18.
19.
           /* Different colors for each div */
20.
21.
           .section1 {
22.
               background-color: skyblue; /* Light Blue */
23.
               padding: 10px;
24.
               border-radius: 8px;
25.
               margin: 10px;
26.
27.
28.
           .section2 {
29.
               background-color:lightgreen; /* Light Green */
30.
               padding: 10px;
               border-radius: 8px;
31.
32.
               margin: 10px;
33.
34.
35.
           .section3 {
36.
               background-color: pink; /* Light Orange */
37.
               padding: 10px;
38.
               border-radius: 8px;
```

```
39.
              margin: 10px;
40.
41.
42.
          .section4 {
43.
              background-color:lightsalmon; /* Light Red */
44.
              padding: 10px;
45.
              border-radius: 8px;
46.
              margin: 10px;
47.
48.
      </style>
49.</head>
50. <body>
51.
52.
      <h1>Use of Some Basic Tags in HTML</h1>
53.
54.
      <div class="section1">
55.
         <b>This is bold text</b>
56.
         <i>This is italic text</i>
57.
         <u>This is underlined text</u>
58.
         This is <strike>strikethrough</strike> text
59.
         <small>This is small text</small>
60.
         <strong>This is strong (important) text</strong>
61.
         <big>This is big text</big>
62.
         <tt>This is typewriter text</tt>
63.
      </div>
64.
65.
      <div class="section2">
66.
         <
67.
             This is preformatted text.
68.
         69.
      </div>
70.
71.
      <div class="section3">
72.
         H<sub>2</sub>0 (Subscript example)
73.
         X<sup>2</sup> + Y<sup>2</sup> = Z<sup>2</sup> (Superscript
   example)
74.
      </div>
75.
      <div class="section4">
76.
         Here is a line break:<br>This text appears on a new line.
77.
      </div>
78.
79.</body>
80.</html>
```

Use of Some Basic Tags in HTML					
This is bold text					
This is italic text					
This is underlined text					
This is strikethrough text					
This is small text					
This is strong (important) text					
This is big text					
This is typewriter text					
This is preformatted text.					
H_2O (Subscript example) $X^2 + Y^2 = Z^2$ (Superscript example)					
Here is a line break: This text appears on a new line.					
Here is a line break:					

2. Write a program for making ordered list, unordered list and definition list.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4.
       <meta charset="UTF-8">
5.
       <meta name="viewport" content="width=device-width, initial-</pre>
   scale=1.0">
       <title>Lists in HTML</title>
6.
7.
       <style>
8.
           body {
9.
               font-family: Arial, sans-serif;
10.
               background-color: darkseagreen;
11.
               margin: 20px;
12.
               padding: 20px;
13.
           h2 {
14.
15.
               color: white;
16.
17.
           .container {
18.
               background: green;
19.
               padding: 15px;
20.
               border-radius: 8px;
21.
               box-shadow: 2px 2px 10px rgba(0, 0, 0, 0.2);
22.
               margin-bottom: 20px;
23.
24.
           ol {
25.
               background:white;
26.
               padding: 10px;
27.
               border-radius: 5px;
28.
29.
           ul {
30.
               background:lightgreen;
31.
               padding: 10px;
32.
               border-radius: 5px;
33.
34.
           d1 {
35.
               background: #fbe7c6;
36.
               padding: 10px;
37.
               border-radius: 5px;
38.
39.
           dt {
40.
                font-weight: bold;
41.
               color: #333;
42.
           dd {
43.
44.
               margin-left: 20px;
```

```
45.
46.
      </style>
47.</head>
48.<body>
49.
50.
      <h1>Lists in HTML</h1>
51.
52.
      <!-- Ordered List -->
53.
      <div class="container">
54.
          <h2>Ordered List (Numbered)</h2>
55.
56.
             First Item
             Second Item
57.
58.
             Third Item
59.
             Fourth Item
60.
          61.
      </div>
62.
63.
      <!-- Unordered List -->
64.
      <div class="container">
65.
          <h2>Unordered List (Bulleted)</h2>
66.
          <l
67.
             Apple
68.
             Banana
69.
             Orange
70.
             Mango
71.
          72.
      </div>
73.
74.
75.
      <div class="container">
76.
          <h2>Definition List</h2>
77.
          <d1>
78.
             <dt>HTML</dt>
79.
             <dd>Stands for HyperText Markup Language</dd>
80.
81.
             <dt>CSS</dt>
82.
             <dd>Stands for Cascading Style Sheets</dd>
83.
84.
             <dt>JS</dt>
85.
             <dd>Stands for Javascript</dd>
86.
          </dl>
87.
     </div>
88.
89.</body>
90.</html>
91.
```



3. Write a program for nesting lists.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4.
       <meta charset="UTF-8">
5.
       <meta name="viewport" content="width=device-width, initial-</pre>
  scale=1.0">
       <title>Nested Ordered and Unordered List</title>
6.
7.
       <style>
8.
           body {
9.
               font-family: Arial, sans-serif;
10.
               background-color: black;
11.
               margin: 20px;
12.
               padding: 20px;
13.
14.
           h1 {
15.
               color: #ff6600;
16.
               text-align: center;
17.
18.
           .container {
19.
               background: #fff;
20.
               padding: 15px;
21.
               border-radius: 8px;
22.
               box-shadow: 2px 2px 10px rgba(0, 0, 0, 0.2);
23.
               margin-bottom: 20px;
24.
25.
           ol, ul {
               padding: 10px;
26.
27.
               border-radius: 5px;
28.
29.
           ol {
30.
               background: #f0f8ff;
31.
           ul {
32.
33.
               background: #d3f9d8;
34.
35.
       </style>
36.</head>
37. <body>
38.
39.
       <h1>Nested Ordered and Unordered List</h1>
40.
41.
       <!-- Nested Ordered List -->
42.
       <div class="container">
43.
           <h2>Nested Ordered List</h2>
44.
```

```
45.
          Introduction
46.
             47.
                What is HTML?
48.
                Basic Structure of HTML
49.
             50.
          51.
          CSS Basics
52.
             53.
                Selectors
54.
                Properties
55.
                CSS Box Model
56.
             57.
          58.
          JavaScript Basics
59.
             60.
                Variables
61.
                Functions
62.
                Events
63.
             64.
65.
       66.
    </div>
67.
68.
     <!-- Nested Unordered List -->
69.
     <div class="container">
70.
       <h2>Nested Unordered List</h2>
71.
       <l
72.
          Fruits
73.
             <l
74.
                Apple
75.
                Banana
76.
                Orange
77.
             78.
79.
          Vegetables
80.
             <l
81.
                Carrot
82.
                Broccoli
83.
                Spinach
84.
             85.
          86.
          Dairy Products
87.
             <u1>
88.
                Milk
89.
                Cheese
90.
                Butter
91.
             92.
```

```
93. 
94. </div>
95.
96.</body>
97.</html>
98.
```



4. Write a program showing horizontal rule in html.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4. <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-</pre>
 scale=1.0">
    <title>Horizontal Rule Example</title>
6.
7.
     <style>
8.
9.
      .custom-hr {
             border: 2px solid black; /* Green color */
10.
              width: 80%;
11.
12. }
             margin: 20px auto;
13. </style>
14.</head>
15. <body>
16.
17. <h2>Above the Horizontal Rule</h2>
18.
     <hr class="custom-hr">
19. <h2>Below the Horizontal Rule</h2>
20.
21.</body>
22.</html>
```

Output:

Above the Horizontal Rule

Below the Horizontal Rule

5. Write a program to add background colour and image using only html.

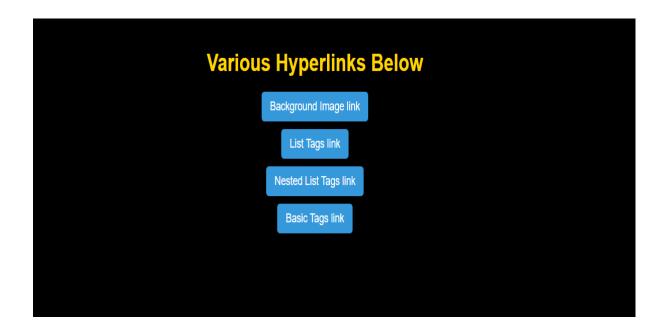
```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4. <meta charset="UTF-8">
     <meta name="viewport" content="width=device-width, initial-</pre>
  scale=1.0">
      <title>Background Color & Image</title>
7. </head>
8. <body style="background-color: lightblue; background-image:</pre>
   url('/images/image.jpg'); background-position: left; background-repeat:
  no-repeat; height: 100vh; margin: 0; display: flex; flex-direction:
  column; align-items: center; justify-content: center; color: black;
  font-family: Arial, sans-serif;">
9.
      <h1>Welcome to My Page</h1>
10.
      This page has a background image.
11.</body>
12.</html>
```



6. Write a program using various hyperlinks with different attributes.

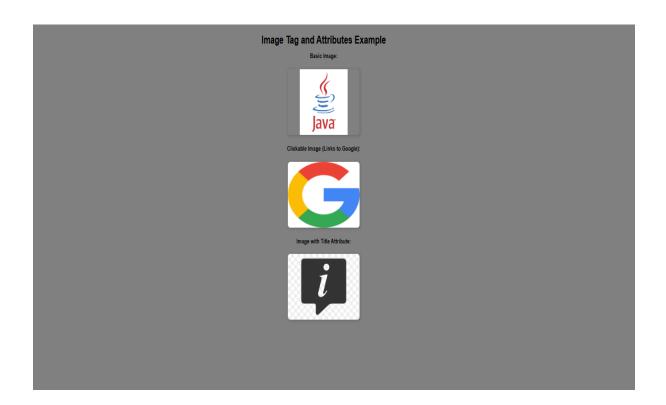
```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4.
       <meta charset="UTF-8">
5.
       <meta name="viewport" content="width=device-width, initial-</pre>
   scale=1.0">
6.
       <title>Hyperlink Example</title>
7.
       <style>
8.
           body {
9.
               font-family: Arial, sans-serif;
10.
               background-color: black; /* Light blue background */
11.
               text-align: center;
12.
               padding: 50px;
13.
14.
15.
           h1 {
16.
               color: gold; /* Darker blue */
17.
               margin-bottom: 20px;
18.
19.
20.
           p {
21.
               margin: 10px 0;
22.
23.
24.
           a {
25.
               display: inline-block;
26.
               background-color: #3498db; /* Blue button */
27.
               color: white;
28.
               text-decoration: none;
29.
               padding: 10px 15px;
30.
               border-radius: 5px;
31.
               transition: 0.3s ease-in-out;
32.
33.
34.
           a:hover {
35.
               background-color: #2980b9; /* Darker blue on hover */
36.
37.
      </style>
38.</head>
39. <body>
40.
       <h1>Various Hyperlinks Below</h1>
41.
       <a href="BGImageAndColor.html">Background Image link</a>
42.
       <a href="Listtags.html">List Tags link</a>
43.
       <a href="NestedLists.html">Nested List Tags link</a>
44.
       <a href="BasicTags.html">Basic Tags link</a>
```

```
45.</body>
46.</html>
```



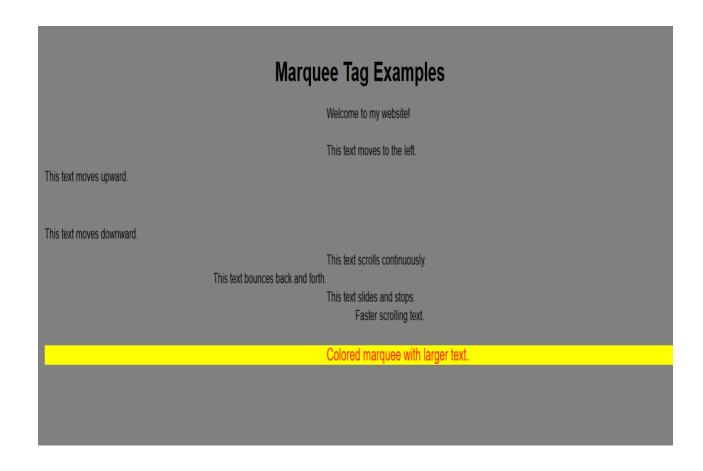
7. Write a program using image tag and its attributes.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4.
       <meta charset="UTF-8">
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
5.
6.
       <title>Image Tag Example</title>
       <style>
8.
           body {
               font-family: Arial, sans-serif;
9.
10.
               text-align: center;
11.
               background-color:gray;
12.
               padding: 20px;
13.
14.
           img {
15.
               border-radius: 10px;
16.
               margin: 10px;
17.
               box-shadow: 2px 2px 10px rgba(0, 0, 0, 0.2);
18.
19.
       </style>
20.</head>
21. <body>
22.
23.
       <h1>Image Tag and Attributes Example</h1>
24.
25.
26.
       <h3>Basic Image:</h3>
27.
       <img src="/images/java.svg" alt="Example Image" width="300"</pre>
   height="200">
28.
29.
       <!-- Clickable Image (Link) -->
30.
       <h3>Clickable Image (Links to Google):</h3>
31.
       <a href="https://www.google.com" target=" blank">
           <img src="/images/google.png" alt="Google Link" width="300"</pre>
   height="200">
33.
       </a>
34.
35. <!-- Image with Title Attribute (Tooltip) -->
36.
       <h3>Image with Title Attribute:</h3>
       <img src="/images/tooltip.png" alt="Hover over me" title="This is a</pre>
   tooltip!" width="300" height="200">
38.
39.</body>
40.</html>
41.
```



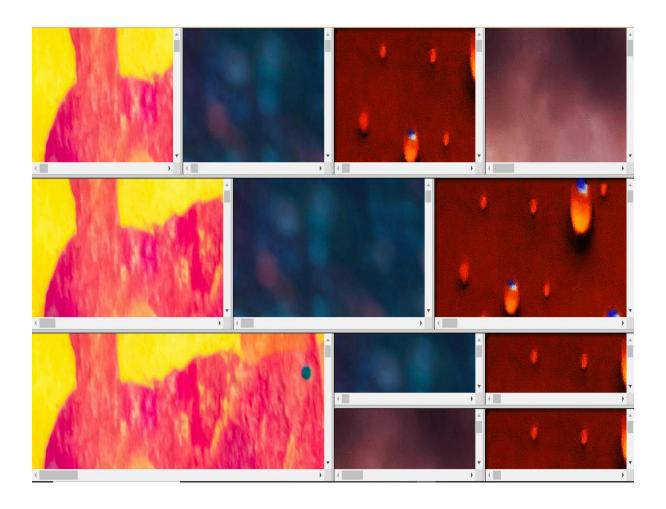
8. Write a program to use marquee tags using different Attributes.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4.
       <meta charset="UTF-8">
       <meta name="viewport" content="width=device-width, initial-scale=1.0">
5.
6.
       <title>Marquee Tag Example</title>
7.
       <style>
8.
           body {
               font-family: Arial, sans-serif;
9.
10.
               text-align: center;
11.
               background-color: gray;
12.
               padding: 20px;
13.
           }
14.
       </style>
15.</head>
16. <body>
17.
18.
       <h1>Marquee Tag Examples</h1>
19.
20.
       <!-- Basic Scrolling Text -->
21.
       <marquee>Welcome to my website!</marquee>
22.
23.
       <!-- Marguee with Direction -->
24.
       <marquee direction="right">This text moves to the right.
25.
       <marquee direction="left">This text moves to the left.
26.
       <marquee direction="up" height="50">This text moves upward./marquee>
27.
       <marquee direction="down" height="50">This text moves
   downward.</marquee>
28.
29.
       <!-- Marquee with Behavior -->
30.
       <marquee behavior="scroll">This text scrolls continuously.</marquee>
31.
       <marquee behavior="alternate">This text bounces back and
   forth.</marquee>
32.
       <marquee behavior="slide">This text slides and stops.</marquee>
33.
34.
       <!-- Marquee with Speed and Scroll Amount -->
35.
       <marquee scrollamount="10">Faster scrolling text.</marquee>
36.
       <marquee scrollamount="2">Slower scrolling text.</marquee>
37.
38.
       <!-- Marquee with Background Color -->
39.
       <marquee style="background-color: yellow; color: red; font-size:</pre>
   20px;">
40.
           Colored marquee with larger text.
41.
       </marquee>
42.
```



9. Write a program by showing frame allocation in html.

```
1. <!DOCTYPE html>
2. <html>
3.
4. <head>
      <title>HTML Frames Example</title>
6. </head>
7.
8. <frameset rows="33%, 34%, 33%">
9.
10.
     <frameset cols="25%, 25%, 25%, 25%" />
11.
      <frame src="/images/frame1.jpg" />
12.
       <frame src="/images/frame2.jpg" />
13.
      <frame src="/images/frame3.jpg" />
14.
      <frame src="/images/frame4.jpg" />
15.
    </frameset>
16.
17.<frameset cols="33%, 33%, 33%">
18. <frame src="/images/frame1.jpg" />
19.
     <frame src="/images/frame2.jpg" />
20.
     <frame src="/images/frame3.jpg" />
21.</frameset>
22.
23.<frameset cols="50%, 50%">
24. <frame src="/images/frame1.jpg" />
25.<frameset rows="50%, 50%">
26.
          <frameset cols="50%, 50%">
27.
              <frame src="/images/frame2.jpg" />
28.
              <frame src="/images/frame3.jpg" />
29.
          </frameset>
30.
     <frameset cols="50%, 50%">
31. <frame src="/images/frame4.jpg" />
32.
     <frame src="/images/frame3.jpg" />
33.
     </frameset>
34.</frameset>
35.</frameset>
36.
37.</frameset>
38.
39.</html>
```



10. Write a program to show table and its attributes.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4. <meta charset="UTF-8">
5.
    <meta name="viewport" content="width=device-width, initial-</pre>
 scale=1.0">
6.
     <title>Student Table</title>
7.
     <style>
8.
        table {
9.
           width: 50%;
10.
           border-collapse: collapse;
11.
           margin: 20px 0;
12.
           font-size: 18px;
13.
           text-align: left;
14.
15.
        th, td {
16.
           border: 1px solid black;
17.
           padding: 10px;
18.
19.
        th {
20.
           background-color: #f2f2f2;
21.
22.
    </style>
23.</head>
24. <body>
25.
26.
27. 
    Name
28.
29.
       Class
30.
       Roll Number
31.
        Age
32. 
33.
    34.
        Aarav Sharma
35.
       10 A
36.
        23
37.
        15
38.
    39.
    40.
        Priya Verma
41.
        9 B
42.
        12
43.
        14
   44.
```

```
45.
46.
      Rahul Singh
47.
      8 C
48.
      8
49.
      13
50.
51.
52.
     Neha Iyer
53.
     7 A
54.
     5
55.
     12
56.
57.
58.
59.</body>
60.</html>
61.
```

Name	Class	Roll Number	Age
Aarav Sharma	10 A	23	15
Priya Verma	9 B	12	14
Rahul Singh	8 C	8	13
Neha Iyer	7 A	5	12

11. Write a program to show rowspan and colspan in a table.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4. <meta charset="UTF-8">
5.
    <meta name="viewport" content="width=device-width, initial-</pre>
 scale=1.0">
6.
     <title>Rowspan and Colspan Example</title>
7.
     <style>
8.
        table {
9.
           width: 60%;
10.
           border-collapse: collapse;
11.
           margin: 20px 0;
12.
           font-size: 18px;
13.
           text-align: center;
14.
15.
        th, td {
16.
           border: 1px solid black;
17.
           padding: 10px;
18.
19.
        th {
20.
           background-color: #f2f2f2;
21.
22.
    </style>
23.</head>
24. <body>
25.
26.
27. 
    Name
28.
29.
       Details
30.
        Age
31.
    32.
    33.
        Class
34.
        Roll Number
35.
    36.
    37.
       Aarav Sharma
38.
        10
39.
        23
40.
        15
41.
    42.
43.
        Priya Verma
44.
        9
```

```
45.
     12
46.
     14
47.
   48.
49.
     Rahul Singh
50.
     8
51.
     8
52.
     13
53.
54. 
55.
56.
    5
57.
     12
58. 
59.
60.
61.</body>
62.</html>
```

Name	Details		A ===
	Class	Roll Number	Age
Aarav Sharma	10	23	15
Priya Verma	9	12	14
Rahul Singh	8	8	13
	7	5	12

12. Write a program to make a form.

```
1. <!DOCTYPE html>
2. <html lang="en">
3. <head>
4.
       <meta charset="UTF-8">
5.
       <meta name="viewport" content="width=device-width, initial-</pre>
   scale=1.0">
6.
       <title>Simple Form</title>
7.
       <style>
8.
           body {
9.
               font-family: Arial, sans-serif;
10.
               display: flex;
11.
               justify-content: center;
12.
               align-items: center;
13.
               height: 100vh;
14.
               background-color: #f2f2f2;
15.
16.
           form {
17.
               background: white;
18.
               padding: 20px;
19.
               border-radius: 10px;
               box-shadow: Opx Opx 10px gray;
20.
21.
               width: 300px;
22.
           label {
23.
24.
               font-weight: bold;
25.
           input, select, textarea {
26.
27.
               width: 100%;
28.
               padding: 8px;
29.
               margin: 5px 0;
30.
               border: 1px solid #ccc;
31.
               border-radius: 5px;
32.
33.
           button {
34.
               background-color: green;
35.
               color: white;
36.
               padding: 10px;
37.
               border: none;
38.
               width: 100%;
39.
               border-radius: 5px;
40.
               cursor: pointer;
41.
               font-size: 16px;
42.
43.
           button:hover {
44.
               background-color: darkgreen;
```

```
45.
46.
     </style>
47.</head>
48.<body>
49.
50.<form>
51.
       <label for="name">Name:</label>
52.
      <input type="text" id="name" name="name" required>
53.
54.
      <label for="email">Email:</label>
      <input type="email" id="email" name="email" required>
55.
56.
57.
      <label for="gender">Gender:</label>
58.
      <select id="gender" name="gender">
59.
           <option value="male">Male</option>
60.
           <option value="female">Female</option>
61.
           <option value="other">Other</option>
62.
      </select>
63.
64.
       <label for="message">Message:</label>
65.
      <textarea id="message" name="message" rows="4"></textarea>
66.
67.
       <button type="submit">Submit</button>
68.</form>
69.
70.</body>
71.</html>
72.
```

