1. HTML: Elements, Attributes, Links, Formatting, Lists, Tables

<!DOCTYPE html>

```
<html lang="en">
   <meta charset="UTF-8" />
   <meta name="viewport" content="width=device-width, initial-scale=1" />
   <title>TOURISMFAV</title>
   <h2>My Top 3 movies of all time</h2>
href="https://www.primevideo.com/region/eu/detail/Stree-2-Sarkate-Ka-Aatan
k/OL3XGEP30JCFV7H3N1ZAJG2VFV"><u>Stree
src="https://encrypted-tbn3.qstatic.com/images?q=tbn:ANd9GcR4Wi7I5w0cH6Ozx
SQ0vPNACrCiEXJeRcSX RsteIZRF9wVPg6Z"
   <i>It is the best horror comedy movie of 2024 for me.</i>
    <b>Stree 2: Sarkate Ka Aatank</b> (transl. Stree 2: Terror of the
Headless) is a 2024 Indian Hindi-language
       comedy horror film directed by Amar Kaushik, written by Niren
Bhatt and produced jointly by Maddock Films and
       Jio Studios. It is the fourth instalment in the Maddock Horror
Comedy Universe and serves as the sequel to the
       movie Stree (2018). The film stars Shraddha Kapoor, Rajkummar Rao,
Pankaj Tripathi, Abhishek Banerjee and
       Aparshakti Khurana as a group of friends who must defeat Sarkata,
a headless malevolent entity abducting the
       women of Chanderi, with Tamannaah Bhatia and Varun Dhawan also
playing crucial roles.
```

```
<h3><a href="https://www.pokemon.com/us"><u>POKEMON</u></a></h3>
   <img src="image-1.jpg" alt="Pokemon" />
trust me it's soo good.</i>
    <b>Pokémon</b> is a Japanese media franchise consisting of video
games, animated series and films, a trading card
       game, and other related media. The franchise takes place in a
shared universe in which humans co-exist with
       creatures known as Pokémon, a large variety of species endowed
with special powers. The franchise's primary
       target audience is children aged 5 to 12, but it is known to
attract people of all ages. Pokémon is estimated to
       be the world's highest-grossing media franchise and is one of the
best-selling video game franchises.
href="https://www.netflix.com/in/title/70121522"><u>3-idiots</u></a></h3>
   <img src="image-2.jpg" alt="3 Idiots" />
   <i>This movie never gets old. Its still in my top after several
years. I am not gonna lie, I have watched it like
           13 times.</i>
   <b>3 Idiots</b> is a 2009 Indian Hindi-language coming-of-age
comedy-drama film written, edited and directed by
       Rajkumar Hirani, co-written by Abhijat Joshi and produced by Vidhu
Vinod Chopra. The film stars Aamir Khan, R.
       Madhavan and Sharman Joshi in the title roles, while Kareena
Kapoor, Boman Irani, Mona Singh and Omi Vaidya play
       supporting roles. Narrated through two parallel timelines, one in
the present and the other set ten years
Indian engineering college and is a satire
       about the intrinsic paternalism under the Indian education
system.
```

```
Movie
               Genre
               Year
               Description
               Link
              Stree -2
               Comedy Horror
               2024
               Best horror comedy movie of 2024 about a headless
href="https://www.primevideo.com/region/eu/detail/Stree-2-Sarkate-Ka-Aatan
k/OL3XGEP30JCFV7H3N1ZAJG2VFV"
                     target=" blank">Watch on Prime Video</a>
               Animation/Adventure
               Ongoing Franchise
               Japanese media franchise with video games,
animated series, films, and trading card game.
               <a href="https://www.pokemon.com/us"
target=" blank">Official Pokémon Site</a>
               3 Idiots
               Comedy Drama
               2009
               Coming-of-age film about friendship and satire of
the Indian education system.
```

```
href="https://www.netflix.com/in/title/70121522" target=" blank">Watch on
Netflix</a>
       <h2>Choose Your Favorite Movie</h2>
       <form action="#" method="post">
           <label for="movies">Select a movie:</label>
           <select id="movies" name="movie">
                <option value="stree2">Stree -2</option>
               <option value="pokemon">Pokémon</option>
           <button type="submit">Submit
       <h2>Watch Trailer</h2>
           <iframe width="560" height="315"</pre>
src="https://www.youtube.com/embed/KVnheXywIbY"
                title="YouTube video player" frameborder="0"
encrypted-media; gyroscope; picture-in-picture"
               allowfullscreen>
           <iframe width="560" height="315"</pre>
src="https://www.youtube.com/embed/yec0136AokQ"
```

2. Write a HTML script to implement HTML elements, attributes, frames, forms, multimedia: images, audio and videos.

```
pre { background:#f7f7f7; padding:12px; border-radius:6px; overflow:auto; }
 table { border-collapse: collapse; width: 100%; margin-top: 8px; }
 th, td { border: 1px solid #cfcfcf; padding: 8px; text-align: left; }
 caption { caption-side: top; font-weight: bold; margin-bottom: 6px; }
 .note { font-size: 0.95rem; color:#555; }
 .muted { color:#666; font-size:0.95rem; }
 .badge { display:inline-block; padding:2px 8px; border-radius:999px; background:#e9f2ff;
color:#0366d6; font-weight:600; font-size:0.85rem; }
</style>
</head>
<body>
<header>
 <h1 id="top" title="Demo page">HTML demo: Elements, Attributes, Links, Formatting, Lists &
Tables</h1>
 A compact example showing common HTML features you asked for — play
with it and modify freely.
</header>
<!-- ELEMENTS & ATTRIBUTES -->
<section aria-labelledby="elements-heading">
 <h2 id="elements-heading">1. Basic elements & attributes</h2>
 <!-- Attributes: id, class, title, lang, data-* -->
 This is a <strong>paragraph</strong> element. It has an <code>id="intro"</code>, a
<code>class="note"</code>,
  and a <code>title</code> attribute shown on hover. You can add custom attributes like
<code>data-source="lesson1"</code>.
 Example of a custom data attribute: <code>data-source="lesson1"</code>. Data attributes are
useful for JavaScript hooks.
 <!-- Image element with alt attribute (accessibility) -->
 <figure>
  <img src="https://via.placeholder.com/400x120?text=HTML+Example" alt="Placeholder image</p>
with text 'HTML Example" width="400" height="120">
  <figcaption class="muted">Figure: Use <code>alt</code> for accessibility.</figcaption>
 </figure>
</section>
<!-- HYPERLINK -->
<section aria-labelledby="link-heading">
 <h2 id="link-heading">2. Hyperlink (anchor) examples</h2>
```

```
>
  External link opening in a new tab:
  <a href="https://developer.mozilla.org/en-US/docs/Web/HTML" target="_blank" rel="noopener"</p>
noreferrer" title="MDN HTML docs">
   MDN - HTML documentation
  </a>.
 >
  Internal link (anchor to the top heading):
  <a href="#top" title="Back to top">Back to top ↑</a>
 </section>
<!-- FORMATTING -->
<section aria-labelledby="format-heading">
 <h2 id="format-heading">3. Text formatting elements</h2>
 >
  Inline formatting: <strong>strong</strong> (semantic emphasis), <em>emphasis</em>,
<b>bold</b>, <i>italic</i>,
  <u>underline</u>, <mark>highlight</mark>, <small>small text</small>, <del>deleted</del>.
>
  Superscript: E = mc<sup>2</sup>. Subscript: H<sub>2</sub>0.
 >
  Quotation: <q cite="https://example.com">This is a short inline quote</q>.
 </section>
<!-- LISTS -->
<section aria-labelledby="lists-heading">
 <h2 id="lists-heading">4. Lists (ordered, unordered, definition)</h2>
 Unordered list (bullets):
 HTML basics
  CSS essentials
  JavaScript fundamentals
 Ordered list (numbers):
 start="1" type="1">
  Write markup
```

```
Style with CSS
 Enhance with JavaScript
 </01>
 >Definition list (term - description):
 <dl>
 <dt>HTML</dt>
 <dd>HyperText Markup Language — the structure of web pages.</dd>
 <dt>Attribute</dt>
 <dd>An extra piece of information on an element, like <code>id</code> or
<code>class</code>.</dd>
 </dl>
</section>
<!-- TABLES -->
<section aria-labelledby="tables-heading">
 <h2 id="tables-heading">5. Tables</h2>
 Tables should be used for tabular data; use proper header (th) and scope
attributes for accessibility.
 <caption id="sales-caption">Quarterly sales (units)</caption>
 <thead>
Product
   Q1
  Q2
   Q3
   Total
  </thead>
 Widget A
   120
   135
  150
   405
  Widget B
   90
 100
 110
300
```

```
Widget C
    60
   80
140
280
<tfoot>
Totals
270
   315
    400
985
   </tfoot>
 </section>
<!-- EXTRA: small script to show how data-* can be used -->
<section aria-labelledby="script-heading">
 <h2 id="script-heading">6. Small JavaScript demo using attributes</h2>
 Click the button to read the <code>data-source</code> attribute we set
earlier.
 <button id="showDataBtn" aria-controls="dataOutput">Show data-source from the intro
paragraph</button>
 <div id="dataOutput" role="status" aria-live="polite" style="margin-top:8px;"></div>
 <script>
  // JavaScript reads attributes like `data-source` and displays the value.
  (function () {
   const btn = document.getElementById('showDataBtn');
const output = document.getElementById('dataOutput');
   btn.addEventListener('click', function () {
const intro = document.querySelector('#intro');
   // read data attribute via dataset
    const ds = intro.dataset.source || 'no data-source found';
output.textContent = 'data-source = ' + ds;
 });
  })();
 </script>
</section>
<footer style="margin-top:36px; font-size:0.95rem;">
```

```
Tip: experiment by changing attributes and tags in this file — that's the
fastest way to learn.
</footer>
</body>
</html>
```

3. Write an External CSS Script including color, background, fonts, tables, lists, selectors, pseudo classes and elements.

```
body {
 background-color: #f0f8ff;
 color: #333;
 font-family: Arial, sans-serif;
h1, h2 {
 color: #0044cc;
 text-align: center;
}
p {
 font-size: 16px;
}
table {
 width: 60%;
 border-collapse: collapse;
 margin: 20px auto;
 background-color: #ffffff;
}
th, td {
 border: 1px solid #333;
 padding: 8px;
 text-align: center;
}
th {
 background-color: #cce5ff;
 color: #000;
}
ul {
 list-style-type: square;
 background-color: #e6f7ff;
```

```
padding: 10px;
}
ol {
 list-style-type: decimal;
 background-color: #fffbe6;
 padding: 10px;
}
a {
 color: #0066cc;
 text-decoration: none;
a:hover {
 color: red;
}
p::first-letter {
 font-size: 22px;
 color: #ff6600;
 font-weight: bold;
}
li:hover {
 background-color: #d9f2ff;
#special {
 color: darkgreen;
 font-style: italic;
}
.highlight {
 background-color: yellow;
//Index.html file
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8">
 <meta name="viewport" content="width=device-width, initial-scale=1.0">
 <title>HTML and CSS Example</title>
 <link rel="stylesheet" href="style.css">
</head>
<body>
```

```
<h1>HTML Elements and CSS Styling</h1>
This paragraph has an ID selector applied through CSS.
<h2>Formatting and Links</h2>
>
 This is a <b>bold</b>, <i>italic</i>, and <u>underlined</u> text example.<br>
 Visit <a href="https://www.wikipedia.org" target="_blank">Wikipedia</a> for more information.
<h2>Unordered List</h2>
Apple
 Banana
 Cherry
<h2>Ordered List</h2>
HTML
 CSS
 JavaScript
</01>
<h2>Table Example</h2>
Name
  Course
  Marks
 Manaswi
  Data Science
  95
 Avi
  Computer Graphics
  92
 <h2>Class Selector Example</h2>
This paragraph uses a class selector with a yellow background.
</body>
```

4. Write an Internal CSS Script including color, background, fonts, tables, lists, selectors, pseudo classes and elements

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Internal CSS Example</title>
 <style>
  body {
   background-color: #f0f8ff;
  color: #222;
   font-family: "Arial", sans-serif;
   margin: 20px;
}
h1, h2 {
color: #0044cc;
text-align: center;
}
p {
 font-size: 16px;
}
table {
   width: 60%;
margin: 20px auto;
   border-collapse: collapse;
   background-color: #ffffff;
}
th, td {
   border: 1px solid #333;
padding: 8px;
  text-align: center;
}
th {
   background-color: #cce5ff;
   color: #000;
```

```
}
ul {
   list-style-type: square;
   background-color: #e6f7ff;
   padding: 10px;
   width: 40%;
}
ol {
   list-style-type: decimal;
   background-color: #fffbe6;
   padding: 10px;
   width: 40%;
}
a {
   color: #0066cc;
   text-decoration: none;
}
  a:hover {
   color: red;
}
  li:hover {
   background-color: #d9f2ff;
}
  p::first-letter {
   font-size: 22px;
   color: #ff6600;
   font-weight: bold;
}
  #special {
   color: darkgreen;
   font-style: italic;
}
  .highlight {
   background-color: yellow;
 }
 </style>
</head>
<body>
```

```
<h1>Internal CSS Demonstration</h1>
This paragraph uses an ID selector for unique styling.
<h2>Formatting and Links</h2>
>
 This is a <b>bold</b>, <i>italic</i>, and <u>underlined</u> example.<br
 Visit <a href="https://www.wikipedia.org" target="_blank">Wikipedia</a> for more info.
<h2>Unordered List</h2>
Apple
 Banana
 Cherry
<h2>Ordered List</h2>
<0|>
 HTML
 CSS
 JavaScript
</01>
<h2>Table Example</h2>
Name
  Course
  Marks
 Manaswi
  Data Science
  95
 Avi
  Computer Graphics
  92
 <h2>Class Selector Example</h2>
This paragraph is highlighted using a class selector.
</body>
```

```
</html>
```

Write an Inline CSS Script including color, background, fonts, tables, lists, selectors, pseudo classes and elements.

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Inline CSS Example</title>
</head>
<body style="background-color: #f0f8ff; font-family: Arial; color: #333;">
<h1 style="color: darkblue; text-align: center;">Inline CSS Demonstration</h1>
This paragraph uses <span style="color: red; font-weight: bold;">inline CSS</span> for styling.
<a href="#" style="color: green; text-decoration: none;"
 onmouseover="this.style.color='red" onmouseout="this.style.color='green"">
 Hover over this link
</a>
<h2 style="margin-top: 20px;">List Example:</h2>
HTML
 CSS
 JavaScript
<h2 style="margin-top: 20px;">Table Example:</h2>
align="center">
 Name
 Subject
 Manaswi
 Data Science
 Avi
 Web Development
```

Write a Java script to find number is even or odd, arraybuilt-in function and onclick change background color.

```
<!DOCTYPE html>
<html>
<head>
<title>Small JS Example</title>
</head>
<body id="b" style="text-align:center; font-family:Arial;">
<h3>JavaScript Example</h3>
<input type="number" id="num" placeholder="Enter number">
<button onclick="check()">Check Even/Odd</button>
<button onclick="changeBg()">Change Background</button>
<script>
 function check() {
  let n = document.getElementById("num").value;
   document.getElementById("res").innerText = (n % 2 == 0) ? "Even" : "Odd";
  let arr = [1,2,3,4,5];
  console.log(arr.reverse()); // array built-in function
 function changeBg() {
  document.getElementById("b").style.background = "lightblue";
 }
</script>
</body>
</html>
```

7. Write a Java script to Asynchronous programming and callbacks.

<!DOCTYPE html>

```
<html>
<head>
<title>Async and Callback Example</title>
<body style="font-family:Arial; text-align:center;">
<h3>Asynchronous Programming using Callback</h3>
<script>
 function showMessage(callback) {
  setTimeout(() => {
   document.write("Task done after 2 seconds<br>");
   callback();
}, 2000);
}
 function afterTask() {
  document.write("Callback function executed!");
}
 showMessage(afterTask);
</script>
</body>
</html>
   8. Write a Java script to promises and arrow function.
<!DOCTYPE html>
<html>
<head>
<title>Promise & Arrow Function</title>
</head>
<body style="font-family:Arial; text-align:center;">
<h3>Promises and Arrow Function Example</h3>
<script>
 let task = new Promise((resolve, reject) => {
  let done = true;
  done?resolve("Task completed successfully!"):reject("Task failed!");
});
 task
   .then(msg => document.write(msg))
   .catch(err => document.write(err));
</script>
```

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

);

9. Write a script including React Components, Props, State, Forms, Events, Routers, Refs, Keys. import React, { useState, useRef } from "react"; import { BrowserRouter as Router, Routes, Route, Link } from "react-router-dom"; function Welcome(props) { return <h2>Hello, {props.name}!</h2>; } function FormExample() { const [input, setInput] = useState(""); const ref = useRef(); const handleSubmit = (e) => { e.preventDefault(); alert("Submitted: " + input); ref.current.focus(); **}**; return (<form onSubmit={handleSubmit}> <input ref={ref} type="text" value={input} onChange={(e) => setInput(e.target.value)} placeholder="Enter text" /> <button type="submit">Submit</button> </form>); } function ListExample() { const items = ["React", "Props", "State"]; return ({items.map((item, index) => ({item} {/* Keys used here */}))}

```
function Home() {
return (
  <div>
   <Welcome name="Manaswi" />
   <FormExample />
   <ListExample />
  </div>
);
}
export default function App() {
return (
  <Router>
   <nav>
    <Link to="/">Home</Link> | <Link to="/about">About</Link>
   </nav>
   <Routes>
   <Route path="/" element={<Home />} />
    <Route path="/about" element={<h2>About Page</h2>} />
   </Routes>
  </Router>
);
}
    10. Write a Node.Js script involving Callbacks, Event loops, Creating express app.
// Import express
const express = require('express');
const app = express();
const port = 3000;
// Simple callback function example
function greet(name, callback) {
  setTimeout(() => {
    callback(`Hello, ${name}!`);
 }, 1000); // simulate async task
// Event loop demonstration
console.log("Start of script");
greet("Manaswi", (message) => {
  console.log(message); // runs after 1 second
});
```

```
console.log("End of script"); // runs first due to async callback
```

```
// Express app: basic route
app.get("/", (req, res) => {
    res.send("<h1>Welcome to Node.js Express App!</h1>");
});

app.get("/about", (req, res) => {
    res.send("This page demonstrates callbacks and event loop.");
});

// Start server
app.listen(port, () => {
    console.log(`Server running at http://localhost:${port}`);
});
```