

1. HTML Page with Header Tags

```
<!DOCTYPE html>
<html>
<head>
  <title>Header Tags Example</title>
  <meta charset="UTF-8">
  <meta name="description" content="Sample Page">
  <meta name="keywords" content="HTML, CSS, JavaScript">
  <meta name="author" content="Author Name">
  <link rel="stylesheet" href="style.css">
  <script src="script.js"></script>
</head>
<body>
  <h1>Main Content</h1>
</body>
</html>
```

2. JavaScript - Nearest Odd Number

```
<script>
function nearestOdd(num) {
  let number = parseInt(num);
  if (number % 2 === 0) {
    number += 1;
  }
  return number;
}
let userNumber = prompt("Enter a number:");
alert("Nearest Odd: " + nearestOdd(userNumber));
</script>
```

3. HTML with Relative Positioning

```
<!-- index.html -->
<div class="parent">
  <div class="child">Relatively Positioned</div>
</div>

<!-- style.css -->
.parent {
  position: relative;
  height: 200px;
  background-color: lightgrey;
}
.child {
  position: relative;
  top: 30px;
  left: 50px;
  background-color: lightblue;
  padding: 10px;
}
```

4. Java Servlet - Student Registration

```

import java.io.*;
import javax.servlet.*;
import javax.servlet.http.*;
public class StudentServlet extends HttpServlet {
    public void doPost(HttpServletRequest req, HttpServletResponse res) throws IOException,
ServletException {
    res.setContentType("text/html");
    PrintWriter out = res.getWriter();
    String name = req.getParameter("name");
    String id = req.getParameter("id");
    out.println("<h1>Student Registered</h1>");
    out.println("<p>Name: " + name + "</p>");
    out.println("<p>ID: " + id + "</p>");
    }
}

```

5. Employee Registration Form (HTML + CSS)

```

<!DOCTYPE html>
<html>
<head>
    <link rel="stylesheet" href="style.css">
</head>
<body>
    <form>
        <label>Employer Name:</label><input type="text"><br>
        <label>ID:</label><input type="text"><br>
        <label>Address:</label><textarea></textarea><br>
        <label>Department:</label><input type="text"><br>
        <label>Mobile:</label><input type="tel"><br>
        <label>City:</label>
        <select>
            <option>New York</option><option>London</option>
        </select><br>
        <input type="submit">
    </form>
</body>
</html>

```

```

/* style.css */
form {
    background-color: #f9f9f9;
    padding: 20px;
    border-radius: 5px;
}

```

6. HTML Elements with Class Selectors (CSS)

```

<!DOCTYPE html>
<html>
<head>
    <link rel="stylesheet" href="style.css">
</head>
<body>
    <div class="section">Section 1</div>

```

```

    <div class="section">Section 2</div>
</body>
</html>

```

```

/* style.css */
.section {
    padding: 15px;
    margin: 10px;
    background-color: #eee;
}

```

7. Float Positioning Example

```

<!-- index.html -->
<div class="left">Left Box</div>
<div class="right">Right Box</div>

<!-- style.css -->
.left {
    float: left;
    width: 45%;
    background-color: red;
    height: 100px;
}
.right {
    float: right;
    width: 45%;
    background-color: blue;
    height: 100px;
}

```

8. JavaScript Number Object Functions

```

<script>
let num = 123.45678;
document.write("Exponential: " + num.toExponential(2) + "<br>");
document.write("Fixed: " + num.toFixed(2) + "<br>");
document.write("String: " + num.toString() + "<br>");
document.write("Negative Infinity: " + Number.NEGATIVE_INFINITY);
</script>

```

9. Email Validation with JavaScript

```

<script>
function validateEmail(email) {
    const re = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
    return re.test(email);
}
let email = prompt("Enter your email:");
alert(validateEmail(email) ? "Valid" : "Invalid");
</script>

```

10. Background GIF with CSS

```

<!DOCTYPE html>

```

```
<html>
<head>
<style>
body {
  background-image: url('bg.gif');
  background-size: 100% 100%;
  opacity: 0.9;
  transition: all 2s ease;
}
</style>
</head>
<body>
<h1>Background GIF</h1>
</body>
</html>
```