<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>JavaScript Basics and Arrow Functions</title>

<style>

body {

font-family: Arial, sans-serif;

margin: 20px;

padding: 20px;

background-color: #f4f4f4;

}

ul {

list-style-type: none;

padding: 0;

}

li {

background: #fff;

margin: 5px 0;

padding: 10px;

border: 1px solid #ccc;

border-radius: 4px;

}

</style>

</head>

<body>

<h1>Even or Odd Numbers</h1>

<button id="generateButton">Generate Numbers</button>

<ul id="numberList"></ul>

<script>

// Function to check if a number is even or odd

const isEven = (num) => num % 2 === 0;

// Function to generate an array of numbers and display them

const generateNumbers = () => {

const numbers = [];

for (let i = 1; i <= 20; i++) {

numbers.push(i);

}

const numberList = document.getElementById('numberList');

numberList.innerHTML = ''; // Clear previous results

numbers.forEach(num => {

const li = document.createElement('li');

li.textContent = `Number: ${num} is ${isEven(num) ? 'Even' : 'Odd'}`;

numberList.appendChild(li);

});

};

// Event listener for the button

document.getElementById('generateButton').addEventListener('click', generateNumbers);

</script>

</body>

</html>