

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

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

  <title>Number System Converter</title>

  <style>

    body {

      font-family: Arial, sans-serif;

      background: #1e1e2f;

      color: #f0f0f0;

      display: flex;

      justify-content: center;

      align-items: center;

      height: 100vh;

      margin: 0;

    }

    .converter {

      background: #2c2c3c;

      padding: 30px;

      border-radius: 10px;

      box-shadow: 0 0 20px rgba(0, 0, 0, 0.4);

      width: 320px;

      text-align: center;

    }

    h1 {

      margin-bottom: 20px;

      color: #00ffff;

    }

  </style>

</head>

<body>
```

```
input, select, button {
  width: 90%;
  padding: 10px;
  margin: 10px 0;
  border: none;
  border-radius: 5px;
  font-size: 16px;
}

input, select {
  background: #3c3c4f;
  color: white;
}

button {
  background: #00bcd4;
  color: white;
  cursor: pointer;
  transition: 0.3s;
}

button:hover {
  background: #0097a7;
}

.output {
  margin-top: 15px;
  padding: 10px;
  background: #3c3c4f;
  border-radius: 5px;
  font-size: 18px;
  word-wrap: break-word;
}
```

```
</style>
</head>
<body>

<div class="converter">
  <h1>Number Converter</h1>

  <input type="text" id="inputValue" placeholder="Enter a number">

  <div>
    <label>From:</label>
    <select id="fromBase">
      <option value="2">Binary</option>
      <option value="8">Octal</option>
      <option value="10" selected>Decimal</option>
      <option value="16">Hexadecimal</option>
    </select>
  </div>

  <div>
    <label>To:</label>
    <select id="toBase">
      <option value="2">Binary</option>
      <option value="8">Octal</option>
      <option value="10" selected>Decimal</option>
      <option value="16">Hexadecimal</option>
    </select>
  </div>
</div>
```

```
<button onclick="convertNumber()">Convert</button>
```

```
<div class="output" id="result">Result will appear here</div>
```

```
</div>
```

```
<script>
```

```
function convertNumber() {
```

```
    const inputValue = document.getElementById("inputValue").value.trim();
```

```
    const fromBase = parseInt(document.getElementById("fromBase").value);
```

```
    const toBase = parseInt(document.getElementById("toBase").value);
```

```
    const resultDiv = document.getElementById("result");
```

```
    if (inputValue === "") {
```

```
        resultDiv.textContent = "Please enter a value.";
```

```
        return;
```

```
    }
```

```
    try {
```

```
        // Convert from input base to decimal
```

```
        const decimalValue = parseInt(inputValue, fromBase);
```

```
        if (isNaN(decimalValue)) throw new Error();
```

```
        // Convert from decimal to output base
```

```
        const convertedValue = decimalValue.toString(toBase).toUpperCase();
```

```
        resultDiv.textContent = `${inputValue} (base ${fromBase}) = ${convertedValue} (base ${toBase});
```

```
    } catch {
```

```
        resultDiv.textContent = "Invalid input for the selected base!";
```

```
    }
```

```
}
```

</script>

</body>

</html>