

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

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

<title>Temperature Conversion Tool</title>

<link rel="stylesheet" href="styles.css">

<style>body {

    font-family: Arial, sans-serif;

    background-color: #f4f4f4;

    margin: 0;

    padding: 0;

    display: flex;

    justify-content: center;

    align-items: center;

    height: 100vh;

}

.container {

    background-color: white;

    padding: 20px;

    border-radius: 8px;

    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

    width: 300px;

    text-align: center;

}

h1 {
```

```
font-size: 24px;
margin-bottom: 20px;
}

label {
display: block;
margin-top: 10px;
font-size: 16px;
}

input[type="number"] {
width: 100%;
padding: 8px;
margin-top: 5px;
border-radius: 4px;
border: 1px solid #ccc;
}

input[type="radio"] {
margin-top: 10px;
}

button {
width: 100%;
padding: 10px;
margin-top: 20px;
background-color: #4CAF50;
color: white;
border: none;
border-radius: 4px;
font-size: 16px;
cursor: pointer;
```

```

    }

    button:hover {

        background-color: #45a049;

    }


    h2 {

        font-size: 20px;

        margin-top: 20px;

    }

    #result {

        font-weight: bold;

    }</style>
</head>

<body>

<div class="container">

<h1>Temperature Conversion Tool</h1>

<form id="tempForm">

<label for="temperature">Enter Temperature:</label>

<input type="number" id="temperature" placeholder="Enter

value" required>

<div>

<input type="radio" id="cToF" name="conversion"

value="CtoF" checked>

<label for="cToF">Celsius to Fahrenheit</label>

<input type="radio" id="fToC" name="conversion"

```

```
value="FtoC">
```

```
<label for="fToC">Fahrenheit to Celsius</label>
```

```
</div>
```

```
<button type="button"
```

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

```
</form>
```

```
<h2>Converted Temperature: <span id="result">---</span></h2>
```

```
</div>
```

```
<script src="script.js">
```

```
function convertTemperature() {
```

```
    // Get the input temperature value
```

```
    let temperature = document.getElementById("temperature").value;
```

```
    // Check if the input is a valid number
```

```
    if (isNaN(temperature) || temperature === "") {
```

```
        alert("Please enter a valid temperature.");
```

```
        return;
```

```
    }
```

```
    // Get the selected conversion type
```

```
    let conversionType =
```

```
    document.querySelector('input[name="conversion"]:checked').value;
```

```
    let result;
```

```
    // Perform conversion based on selected type
```

```
    if (conversionType === "CtoF") {
```

```
result = (temperature * 9/5) + 32;  
result = result.toFixed(2); // Round the result to 2 decimal
```

```
places
```

```
} else if (conversionType === "FtoC") {
```

```
result = (temperature - 32) * 5/9;
```

```
result = result.toFixed(2); // Round the result to 2 decimal
```

```
places
```

```
}
```

```
// Display the result on the page
```

```
document.getElementById("result").textContent = result;
```

```
}
```

```
</script>
```

```
</body>
```

```
</html>
```