```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width,</pre>
initial-scale=1.0">
<title>Temperature Conversion Tool</title>
<link rel="stylesheet" href="html.css">
</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>
```

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</form>
<h2>Converted Temperature: <span id="result">---</span></h2>
</div>
<script>
 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>
CSS
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;
```

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}
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;
}
```

Result:

## Temperature Conversion Tool Enter Temperature: Entervalue Celsius to Fahrenheit Fahrenheit to Celsius Convert Convert Converted Temperature: ---