In this project, you'll create a script that calculates the Celsius equivalent of a Fahrenheit temperature. Note that your result should work on all modern browsers, but will not work on IK or previous versions of IE.

1. In your text editor, open **index.htm** from the Lab2-TempConverter folder. Enter your name and today's date where indicated in the comment section in the document head.

2. At the bottom of the document, before the closing `< /body>` tag, enter `<script>`, insert a blank line, and then enter `</script>` to create a new script section.

3. Within the script section you created in the previous step, enter the following function.

```
46      <script>
47        function convert() {
48          var degF = document.getElementById("fValue").value,
49              degC = degF - 32 * 5 / 9;
50
51          document.getElementById("cValue").innerHTML = degC;
52        }
53      </script>
```

This function, named `convert ()`, starts by looking up the Fahrenheit value entered by users and assigning it to a variable named `degF`. It then performs calculations on`degF` to arrive at the Celsius equivalent, which is assigned to a variable named `degC`. Finally, it assigns the value of `degC` as the `innerHTML` value of the element with the `id`value `cValue`.

4. Below the closing } for the `convert ()` function, but before the closing `</script>` tag, enter the following statement to add an event listener:

```
54        document.getElementById("button").addEventListener("click", convert);
```

5. Save your work, open **index.htm** in your browser, enter **−40** in the Enter temp in ° F box, and then click the **Convert to ° C** button. −40° Fahrenheit is actually equivalent to −40° Celsius. However, the formula incorrectly calculates that −40° F is equivalent to −57.7° C. This is because the calculations in the equation must take place in a different order than the order of precedence dictates.

6. Return to the **index.htm** file in your text editor, and then add two sets of parentheses to the first statement in the `convert ()` function to modify the order in which the calculations are performed, as follows:

```
49              degC = (degF - 32) * (5 / 9);
```

7. Save your work, refresh or reload **index.htm** in your browser, enter **−40** in the Enter temp in ° F box, and then click the **Convert to ° C** button. As Figure 2-18 shows, the temperature is now calculated correctly as −40° C.

Figure : Fahrenheit to Celsius converter