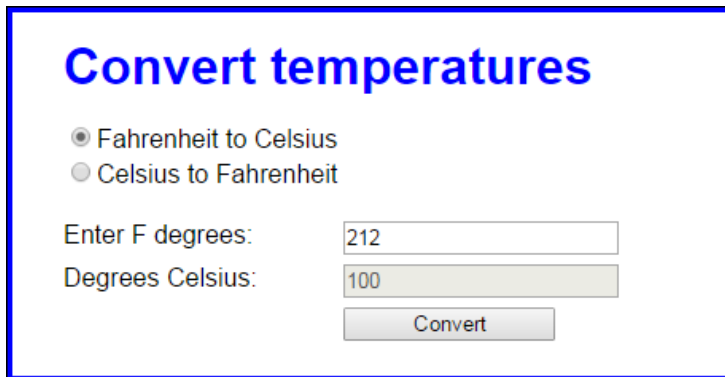


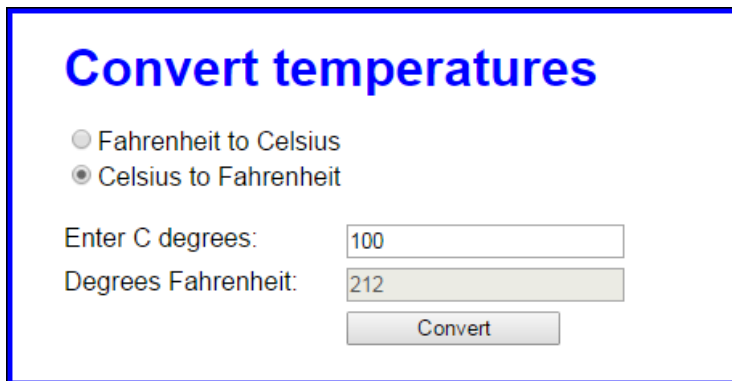
Assign #2 Temperature converter

In this assignment you'll use radio buttons to determine whether the conversion is from Fahrenheit to Celsius or vice versa. You'll also modify the DOM so the labels change when a radio button is clicked. When the application starts, it will look like this:



The screenshot shows a web form titled "Convert temperatures" in blue text. Below the title are two radio buttons: "Fahrenheit to Celsius" (which is selected) and "Celsius to Fahrenheit". Below the radio buttons are two text input fields. The first field is labeled "Enter F degrees:" and contains the value "212". The second field is labeled "Degrees Celsius:" and contains the value "100". Below the input fields is a "Convert" button.

When the user clicks on the second radio button, the labels will change so the interface will look like this:



The screenshot shows the same web form as before, but with the "Celsius to Fahrenheit" radio button selected. The labels and values in the input fields have changed: the first field is now labeled "Enter C degrees:" and contains "100", and the second field is labeled "Degrees Fahrenheit:" and contains "212". The "Convert" button remains at the bottom.

1. Open the HTML and JavaScript files in this folder:
`Assign2_start\`
2. Note that the JavaScript file has some starting JavaScript code, including the \$ function, a clearTextBoxes function, and an onload event handler that attaches three event handlers named convertTemp, toCelsius, and toFahrenheit.
3. Code the toFahrenheit function that is executed when the user clicks on the second radio button. It should change the text in the labels for the text boxes so they read as in the second interface above. It should also call the clearTextBoxes function to clear the text boxes.
4. Code the toCelsius function that is executed when the user clicks on the first radio button. It should change the text in the labels for the text boxes so they read as in the first interface above. It should also call the clearTextBoxes function to clear the text boxes.
5. Code the convertTemp function without any data validation. It should calculate the temperature based on which button is checked. To convert Fahrenheit to Celsius, first

subtract 32 from the Fahrenheit temperature, and then multiply that result by 5/9. To convert Celsius to Fahrenheit, first multiply Celsius by 9/5, and then add 32. The result in either case should be rounded to zero decimal places.

6. Add data validation to the convertTemp function. The only test is whether the entry is a valid number. If it isn't, this message should be displayed in a dialog box: "You must enter a valid number for degrees."
7. Add any finishing touches to the application like moving the focus to the first text box whenever that's appropriate

Rubric (10 points) The assignment will be assessed according to the following criteria:

- Problem Has Been Solved and meets all requirements based on the Written Instructions (10 pts)
- Mostly Meets Requirements (7-9pts)
- Somewhat Meets Requirements (4-6pts)
- Rarely Meets Requirements (1-3pts)
- Not Attempted (0 pts)