

ITC 162 Grading Criteria (please read carefully and ask for clarification if needed).

Does the code run? – 50 points

- No more than 20 points will be given if the code doesn't run.

Correctness of code – 40 points

- Does the code perform per requirements as specified in the assignment?
- Does the program produce the correct prompts to the user?
- Does the program calculate the correct values?
- Does the program display the results correctly?
  - \* As applicable for the assignment

Clarity of code – 10 points

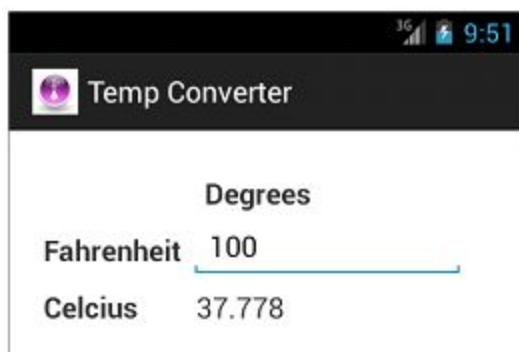
- Does the program use good names for variables?
- Is the code commented and spaced so that it is easy to read and understand? Use blank lines as appropriate.

Incorrect submission

- Your assignment will not be graded if it is not submitted in the right place on Canvas or if the submission is not in the file format specified for the assignment.
- You will be allowed to resubmit, however you might lose points due to late submission.

**Write the Java code for the Temp Converter app**

1. In this exercise, you'll write the Java code for an app that converts temperature from degrees Fahrenheit to degrees Celsius. When you're done, the app should look like this:



Open the app and test it

1. Start Android Studio and open the project named ch03\_ex4\_TempConverter (can be found as a .zip file in Week 3 module).
2. Run this project and test the app with a valid subtotal like 100. The app should accept this input, but it shouldn't perform any calculations or display any results.

Write the Java code

1. Open the Java class for the only activity of this app.
2. Use the onCreate method to get references to the EditText widget and the TextView widget that displays the degrees in Celsius.
3. Create an event handler for the EditorAction event for the EditText widget. The event handler should calculate and display the degrees in Celsius when the Done key is pressed on the soft keyboard. The formula for converting temperatures from Fahrenheit to Celsius is:  
$$c = (f - 32) * 5/9$$

1. Test the app. At this point, it should make the calculation correctly. However, it will lose its data if you change orientation or navigate away from the app.
2. Override the onPause method so it saves a string for the degrees Fahrenheit and Celsius. Then, modify the onResume method so it gets these strings and sets them on the appropriate widgets.
3. Test the app again. This time, the app should always remember its data even if you change orientation or navigate away from the app and return to it.