Build a GUI to find the roots of quadratic equations. The GUI should include three edit boxes, with appropriate labels, to allow the user to input the quadratic, linear, and constant coefficients. There should be a checkbox that allows complex roots if checked, and does not allow complex roots if unchecked. There should be a button labeled “SOLVE” with a callback that finds the roots when pressed. The dialog box should also include text to display the roots, and the edit boxes should have default values.

In the button callback function, extract the three coefficients and the checkbox value from the user controls. Find the roots using the “roots” function. If the less than 2 roots are found, an error dialog should be displayed, and the roots display should not be updated. Otherwise, the roots should be displayed to the dialog box. If the roots are complex and the checkbox is not checked, an error should be returned stating that the roots are complex, and the results display should say that they are complex. If the roots are real, or if the checkbox is checked and the roots are complex, the roots should be displayed in the dialog box.

Try creating a GUI that looks something like what is below, before you look at the solutions.