Homework Assignment: Comprehensive Tkinter Exercise

Task 1: Creating a Simple Information Display

- 1. Create a Tkinter window with the title "Information Display."
- 2. Add a Label widget to display a welcome message.
- 3. Add another Label widget to display your name.
- 4. Create a Button widget labeled "Show Info."
- 5. When the "Show Info" button is clicked, update the welcome message and your name in the labels.

Task 2: Color Changing Button

- 6. Add a Button widget labeled "Change Color."
- 7. When the "Change Color" button is clicked, change the background color of the window to a random color.

Task 3: Counter Button

- 8. Add a Label widget to display a counter (initially set to 0).
- 9. Create a Button widget labeled "Increment Counter."
- 10. When the "Increment Counter" button is clicked, increment the counter value and update the label.

Task 4: Toggle Text Button

- 11. Create a Button widget labeled "Toggle Text."
- 12. Initially, the button should display the text "Hide Labels."
- 13. When the "Toggle Text" button is clicked, alternate between showing and hiding the welcome message and your name labels.

Task 5: Exit Button

- 14. Add a Button widget labeled "Exit Program."
- 15. When the "Exit Program" button is clicked, close the Tkinter window and exit the program.

Feel free to customize the assignment further based on the complexity you want to introduce. This should provide a comprehensive exercise for working with labels and buttons in Tkinter.