

# DIGITAL CLOCK

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# CONTENT

- This project demonstrates the creation of a simple digital clock using the Tkinter library in Python.
- The clock updates every second to display the current time, showcasing the ability to create real-time applications using Tkinter.

# TECHNOLOGY

**PYTHON** : The programming language used to develop the application.

**TKINTER** : Tkinter is a standard Python library used for creating graphical user interfaces (GUIs).  
Tkinter provides a way to create windows, dialogs, buttons, text fields, and other common GUI elements in a Python application.

# KEY FEATURES

01

**Real-Time Clock:** Displays the current time in a digital format, updating every second.

02

**Customizable Appearance:** The clock's font, background color, and text color can be customized.

03

**GUI Interface:** Provides a user-friendly interface where the time is displayed clearly.

# OVERVIEW

- The primary objective of this project is to create a functional digital clock using Python's Tkinter library, which will display the current time in hours, minutes, and seconds, updating every second.

# CODE

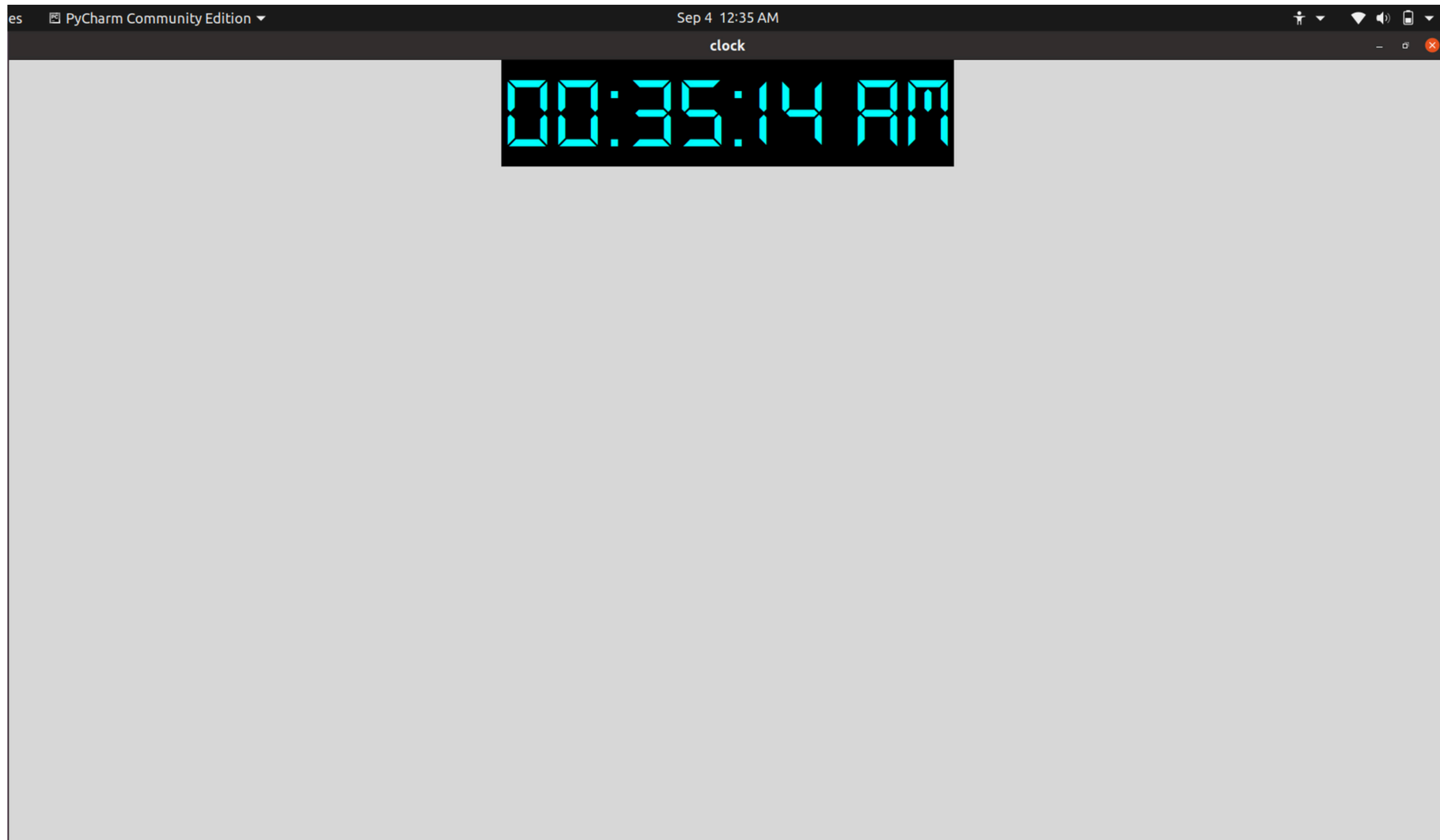
- **from tkinter import \*:** This imports all classes and functions from the tkinter module, which is used to create graphical user interfaces (GUIs) in Python.
- **from tkinter.ttk import \*:** This imports the themed widget set (ttk) from tkinter, which provides modern-looking widgets.
- **from time import strftime:** This imports the strftime function from the time module, which is used to format date and time.
- **root = Tk():** This creates the main application window.
- **root.title("clock"):** This sets the title of the window to "clock".

- **def time():** : This defines a function named time.
- **string = strftime('%H:%M:%S %p')**: This line formats the current time as hours, minutes, and seconds (%H:%M:%S) followed by AM or PM (%p).
- **Label\_.config(text=string)**: This updates the text displayed on the Label\_ widget to the current time stored in the string variable.
- **Label\_.after(1000, time)**: This schedules the time function to be called again after 1000 milliseconds (1 second), creating a loop that continuously updates the time.

- **Label\_ = Label(root, font=("ds-digital", 80), background="black", foreground="cyan"):** This creates a Label widget that will display the time. The font is set to "ds-digital" with a size of 80. The background color is set to "black", and the text color is set to "cyan".
- **Label\_.pack(anchor='center'):** This places the Label widget in the center of the window using the pack geometry manager.
- **time():** This calls the time function to start the clock.
- **mainloop():** This starts the Tkinter event loop, which waits for events such as button clicks or key presses. It keeps the window open and responsive until the user closes it.



# OUTPUT



THANK YOU