**TASK 11: Use Tkinter Module for UI Design**

**Problem 1: Age Calculator**

**Question:**

Write a Python program using the **Tkinter** module to create a simple **Age Calculator**.  
The program should allow the user to enter their **date of birth (DD/MM/YYYY)** and, upon clicking a button, should display their **age in years**.

**Program:**

import tkinter as tk

from datetime import datetime

def calculate\_age():

dob = entry.get()

try:

birth\_date = datetime.strptime(dob, "%d/%m/%Y")

today = datetime.today()

age = today.year - birth\_date.year - ((today.month, today.day) < (birth\_date.month, birth\_date.day))

result\_label.config(text=f"Your age is {age} years")

except ValueError:

result\_label.config(text="Please enter date in DD/MM/YYYY format")

root = tk.Tk()

root.title("Age Calculator")

tk.Label(root, text="Enter DOB (DD/MM/YYYY):").pack(pady=5)

entry = tk.Entry(root)

entry.pack(pady=5)

tk.Button(root, text="Calculate Age", command=calculate\_age).pack(pady=5)

result\_label = tk.Label(root, text="")

result\_label.pack(pady=5)

root.mainloop()

**output:**

Enter DOB (DD/MM/YYYY): 05/09/2002

Your age is 23 years

**Problem 2: Digital Clock**

**Question:**

Write a Python program using the **Tkinter** module to create a **Digital Clock**.  
The clock should display the **current time** in the format **HH:MM:SS** and update automatically every second.

**Program:**

**import tkinter as tk**

**import time**

**def update\_time():**

**current\_time = time.strftime("%H:%M:%S")**

**clock\_label.config(text=current\_time)**

**clock\_label.after(1000, update\_time)**

**root = tk.Tk()**

**root.title("Digital Clock")**

**clock\_label = tk.Label(root, font=("calibri", 40, "bold"), fg="blue")**

**clock\_label.pack(padx=20, pady=20)**

**update\_time()**

**root.mainloop()**