import tkinter as tk

from tkinter import simpledialog, messagebox

class ATM:

def \_\_init\_\_(self, master):

self.master = master

self.master.title("ATM")

self.balance = 1000

self.pin = "1234"

self.transaction\_history = []

self.create\_widgets()

def create\_widgets(self):

self.label = tk.Label(self.master, text="Welcome to the ATM")

self.label.pack()

self.balance\_button = tk.Button(self.master, text="Balance Enquiry", command=self.balance\_enquiry)

self.balance\_button.pack()

self.withdraw\_button = tk.Button(self.master, text="Cash Withdrawal", command=self.cash\_withdrawal)

self.withdraw\_button.pack()

self.deposit\_button = tk.Button(self.master, text="Cash Deposit", command=self.cash\_deposit)

self.deposit\_button.pack()

self.pin\_change\_button = tk.Button(self.master, text="PIN Change", command=self.pin\_change)

self.pin\_change\_button.pack()

self.history\_button = tk.Button(self.master, text="Transaction History", command=self.transaction\_history\_view)

self.history\_button.pack()

def balance\_enquiry(self):

messagebox.showinfo("Balance Enquiry", f"Your current balance is: ${self.balance}")

self.transaction\_history.append("Balance Enquiry")

def cash\_withdrawal(self):

amount = simpledialog.askinteger("Cash Withdrawal", "Enter amount to withdraw:")

if amount is not None:

if amount > self.balance:

messagebox.showwarning("Error", "Insufficient balance")

else:

self.balance -= amount

messagebox.showinfo("Success", f"${amount} withdrawn successfully")

self.transaction\_history.append(f"Cash Withdrawal: ${amount}")

def cash\_deposit(self):

amount = simpledialog.askinteger("Cash Deposit", "Enter amount to deposit:")

if amount is not None:

self.balance += amount

messagebox.showinfo("Success", f"${amount} deposited successfully")

self.transaction\_history.append(f"Cash Deposit: ${amount}")

def pin\_change(self):

current\_pin = simpledialog.askstring("PIN Change", "Enter current PIN:")

if current\_pin == self.pin:

new\_pin = simpledialog.askstring("PIN Change", "Enter new PIN:")

confirm\_pin = simpledialog.askstring("PIN Change", "Confirm new PIN:")

if new\_pin == confirm\_pin:

self.pin = new\_pin

messagebox.showinfo("Success", "PIN changed successfully")

self.transaction\_history.append("PIN Change")

else:

messagebox.showwarning("Error", "PINs do not match")

else:

messagebox.showwarning("Error", "Incorrect current PIN")

def transaction\_history\_view(self):

history = "\n".join(self.transaction\_history)

messagebox.showinfo("Transaction History", history if history else "No transactions yet")

if \_\_name\_\_ == "\_\_main\_\_":

root = tk.Tk()

atm = ATM(root)

root.mainloop()