# Simple ATM Machine Simulation

# Predefined 10 accounts (name, pin, balance, history)

accounts = {

"alice": {"pin": "1111", "balance": 5000, "history": []},

"bob": {"pin": "2222", "balance": 3000, "history": []},

"charlie": {"pin": "3333", "balance": 7000, "history": []},

"david": {"pin": "4444", "balance": 2500, "history": []},

"eva": {"pin": "5555", "balance": 8000, "history": []},

"frank": {"pin": "6666", "balance": 10000, "history": []},

"grace": {"pin": "7777", "balance": 1500, "history": []},

"helen": {"pin": "8888", "balance": 4000, "history": []},

"ivan": {"pin": "9999", "balance": 6000, "history": []},

"julia": {"pin": "0000", "balance": 2000, "history": []}

}

def main\_menu():

print("\n=== ATM Menu ===")

print("1. Check Balance")

print("2. Deposit Money")

print("3. Withdraw Money")

print("4. View Transaction History")

print("5. Logout")

def login():

print("=== Welcome to the ATM ===")

name = input("Enter your name: ").lower()

pin = input("Enter your PIN: ")

if name in accounts and accounts[name]["pin"] == pin:

print(f"\nLogin successful. Welcome {name.title()}!")

return name

else:

print("Invalid name or PIN.")

return None

def check\_balance(user):

print(f"Your current balance is: ₹{accounts[user]['balance']}")

def deposit(user):

try:

amt = float(input("Enter amount to deposit: "))

if amt > 0:

accounts[user]['balance'] += amt

accounts[user]['history'].append(f"Deposited ₹{amt}")

print("Deposit successful.")

check\_balance(user)

else:

print("Amount must be positive.")

except ValueError:

print("Enter a valid amount.")

def withdraw(user):

try:

amt = float(input("Enter amount to withdraw: "))

if amt <= 0:

print("Amount must be positive.")

elif amt > accounts[user]['balance']:

print("Insufficient balance.")

else:

accounts[user]['balance'] -= amt

accounts[user]['history'].append(f"Withdrew ₹{amt}")

print("Withdrawal successful.")

check\_balance(user)

except ValueError:

print("Enter a valid amount.")

def view\_history(user):

history = accounts[user]['history']

if not history:

print("No transactions yet.")

else:

print("Transaction History:")

for h in history:

print("-", h)

# Main program

while True:

user = login()

if user:

while True:

main\_menu()

choice = input("Choose an option (1-5): ")

if choice == '1':

check\_balance(user)

elif choice == '2':

deposit(user)

elif choice == '3':

withdraw(user)

elif choice == '4':

view\_history(user)

elif choice == '5':

print("Logging out...")

break

else:

print("Invalid option. Please select 1-5.")