class BankAccount:

def \_\_init\_\_ (self, account\_number, account\_holder\_name, initial\_balance=0):

self. \_account\_number = account\_number

self. \_account\_holder\_name = account\_holder\_name

self. \_account\_balance = initial\_balance

def deposit (self, amount):

if amount > 0:

self. \_account\_balance += amount

return True

else:

return False

def withdraw(self, amount):

if 0 < amount <= self. \_account\_balance:

self. \_account\_balance -= amount

return True

else:

return False

def display\_balance(self):

return f"Account Holder: {self. \_account\_holder\_name}, Account Number: {self. \_account\_number}, Balance: ${self. \_account\_balance:.2f}"

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

account\_number = input("Enter your account number: ")

account\_holder\_name = input("Enter your account holder name: ")

initial\_balance = float(input("Enter initial account balance: "))

account = BankAccount(account\_number, account\_holder\_name, initial\_balance)

while True:

print("\n1. Deposit")

print("2. Withdraw")

print("3. Display Balance")

print("4. Exit")

choice = input("Enter your choice (1/2/3/4): ")

if choice == "1":

amount = float(input("Enter the deposit amount: "))

if account.deposit(amount):

print(f"Deposited ${amount:.2f} successfully.")

else:

print("Invalid deposit amount.")

elif choice == "2":

amount = float(input("Enter the withdrawal amount: "))

if account.withdraw(amount):

print(f"Withdrawn ${amount:.2f} successfully.")

else:

print("Invalid withdrawal amount.")

elif choice == "3":

print(account.display\_balance())

elif choice == "4":

print("Exiting the program.")

break

else:

print("Invalid choice. Please select a valid option.")