

# TASK 3

## ATM INTERFACE

```
class BankAccount:

    def __init__(self, balance=0.0):
        self.balance = balance

    def deposit(self, amount):
        if amount > 0:
            self.balance += amount
            return True
        else:
            return False

    def withdraw(self, amount):
        if 0 < amount <= self.balance:
            self.balance -= amount
            return True
        else:
            return False

    def get_balance(self):
        return self.balance
```

```
class ATM:

    def __init__(self, account):
        self.account = account

    def show_menu(self):
        print("\nATM Menu:")
```

```
print("1. Deposit")
print("2. Withdraw")
print("3. Check Balance")
print("4. Exit")

def deposit(self, amount):
    if self.account.deposit(amount):
        print(f"Successfully deposited {amount}.")
    else:
        print("Invalid deposit amount.")

def withdraw(self, amount):
    if self.account.withdraw(amount):
        print(f"Successfully withdrew {amount}.")
    else:
        print("Insufficient balance or invalid amount.")

def check_balance(self):
    balance = self.account.get_balance()
    print(f"Your current balance is: {balance:.2f}")

def run(self):
    while True:
        self.show_menu()
        choice = input("Enter your choice: ").strip()

        if choice == '1':
            amount = float(input("Enter amount to deposit: "))
            self.deposit(amount)
        elif choice == '2':
            amount = float(input("Enter amount to withdraw: "))
```

```
        self.withdraw(amount)

    elif choice == '3':

        self.check_balance()

    elif choice == '4':

        print("Thank you for using the ATM. Goodbye!")

        break

    else:

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

```
if __name__ == "__main__":

    # Create a bank account with an initial balance

    account = BankAccount(1000.0)


    # Create an ATM with the bank account

    atm = ATM(account)


    # Run the ATM

    atm.run()
```