TASK NO:-3 ATM INTERFACE:-

import java.util.Scanner;

class ATM {

private BankAccount account;

public ATM(BankAccount account) {

this.account = account;

}

public void displayMenu() {

System.out.println("ATM Menu");

System.out.println("1. Withdraw");

System.out.println("2. Deposit");

System.out.println("3. Check Balance");

System.out.println("4. Exit");

}

public void withdraw(double amount) {

if (account.withdraw(amount)) {

System.out.println("Withdrawal successful.");

} else {

System.out.println("Insufficient funds.");

}

}

public void deposit(double amount) {

account.deposit(amount);

System.out.println("Deposit successful.");

}

public void checkBalance() {

System.out.println("Your current balance is: " + account.getBalance());

}

}

class BankAccount {

private double balance;

public BankAccount(double initialBalance) {

this.balance = initialBalance;

}

public double getBalance() {

return balance;

}

public boolean withdraw(double amount) {

if (amount <= balance) {

balance -= amount;

return true;

} else {

return false;

}

}

public void deposit(double amount) {

balance += amount;

}

}

public class ATMMain {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

BankAccount userAccount = new BankAccount(1000.0); // Initial balance

ATM atm = new ATM(userAccount);

int choice;

do {

atm.displayMenu();

System.out.print("Enter your choice: ");

choice = scanner.nextInt();

switch (choice) {

case 1:

System.out.print("Enter withdrawal amount: ");

double withdrawalAmount = scanner.nextDouble();

atm.withdraw(withdrawalAmount);

break;

case 2:

System.out.print("Enter deposit amount: ");

double depositAmount = scanner.nextDouble();

atm.deposit(depositAmount);

break;

case 3:

atm.checkBalance();

break;

case 4:

System.out.println("Thank you for using the ATM.");

break;

default:

System.out.println("Invalid choice.");

}

} while (choice != 4);

scanner.close();

}

}

OUTPUT:-

ATM Menu

1. Withdraw

2. Deposit

3. Check Balance

4. Exit

Enter your choice: 3

Your current balance is: 1000.0

ATM Menu

1. Withdraw

2. Deposit

3. Check Balance

4. Exit

Enter your choice: 1

Enter withdrawal amount: 700

Withdrawal successful.

ATM Menu

1. Withdraw

2. Deposit

3. Check Balance

4. Exit

Enter your choice: 1

Enter withdrawal amount: 400

Insufficient funds.

ATM Menu

1. Withdraw

2. Deposit

3. Check Balance

4. Exit

Enter your choice: 2

Enter deposit amount: 3000

Deposit successful.

ATM Menu

1. Withdraw

2. Deposit

3. Check Balance

4. Exit

Enter your choice: 4

Thank you for using the ATM.