public class BankAccount {

private String accountNumber;

private String accountHolder;

private double balance;

public BankAccount(String accountNumber,String accountHolder,double balance){

this.accountNumber=accountNumber;

this.accountHolder=accountHolder;

this.balance=balance;

}

public void displayAccountDetails() {

System.out.println("Account Number:"+accountNumber);

System.out.println("Account Holder:"+accountHolder);

System.out.println("current balance: $"+balance);

System.out.println("-------------------");

}

public void deposit(double amount) {

if(amount>0){

balance+=amount;

System.out.println("deposited $"+amount+"into"+accountNumber);

} else {

System.out.println("invalid deposit amount.");

}

}

public boolean withdraw(double amount) {

if(amount>0 && amount<=balance) {

balance -=amount;

System.out.println("withdrawn $" + amount+"from"+accountNumber);

return true;

} else {

System.out.println("insufficient funds or invalid amount");

return false;

}

}

public boolean transferFunds(BankAccount Receiver,double amount) {

if(withdraw(amount)){

Receiver.deposit(amount);

System.out.println("Transfer Successful : $"+amount+"from"+this.accountNumber+"to"+Receiver.accountNumber);

return true;

}

return false;

}

public class BankSystem {

public static void main(String[] args) {

BankAccount acc1 = new BankAccount("123456","alice johnson",5000);

BankAccount acc2 = new BankAccount("789012","bob smith",3000);

System.out.println("initial Account details:");

acc1.displayAccountDetails();

acc2.displayAccountDetails();

System.out.println("Attempting Fund Transfer..");

acc1.transferFunds(acc2,1500);

System.out.println("updated account details:");

acc1.displayAccountDetails();

acc2.displayAccountDetails();

}

}}