Develop a Java program to create a class Bank that maintains two kinds of account for its customers, one called savings account and the other current account. The savings account provides compound interest and withdrawal facilities but no cheque book facility. The current account provides cheque book facility but no interest. Current account holders should also maintain a minimum balance and if the balance falls below this level, a service charge is imposed.Create a class Account that stores customer name, ccount number and type of account. From this derive the classes Cur-acct and Sav-acct to make them more specific to their requirements. Include the necessary methods in order to achieve the following tasks:a) Accept deposit from customer and update the balance.b) Display the balance.c) Compute and deposit interestd) Permit withdrawal and update the balanceCheck for the minimum balance, impose penalty if necessary and update the balance.

class Account {

private String name;

private String account;

private double bal;

public Account(String name, String accnum, double bal) {

this.name = name;

this.account = accnum;

this.bal = bal;

}

public void deposit(double amt) {

if (amt > 0) {

bal += amt;

System.out.println("Deposited: " + amt);

} else {

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

}

}

public void displayBal() {

System.out.println("Balance: " + bal);

}

public void withdraw(double amt) {

if (amt > 0 && amt <= bal) {

bal -= amt;

System.out.println("Withdrawn: " + amt);

} else {

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

}

}

public double getBal() {

return bal;

}

public void setBal(double bal) {

this.bal = bal;

}

}

class SavAct extends Account {

private static final double int\_rate = 6.05;

public SavAct(String name, String accnum, double bal) {

super(name, accnum, bal);

}

public void addInterest() {

double interest = getBal() \* int\_rate / 100;

setBal(getBal() + interest);

System.out.println("Interest added: " + interest);

}

}

class CurAct extends Account {

public static final double win\_bal = 500;

public static final double penalty = 50;

public CurAct(String name, String accnum, double bal) {

super(name, accnum, bal);

}

public void withdraw(double amt) {

if (amt > 0 && getBal() - amt >= win\_bal) {

setBal(getBal() - amt);

System.out.println("Withdrawn: " + amt);

checkMinBal();

} else {

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

}

}

private void checkMinBal() {

if (getBal() < win\_bal) {

setBal(getBal() - penalty);

System.out.println("Below min balance, penalty applied: " + penalty);

}

}

}

public class Bank {

public static void main(String[] args) {

SavAct savacc = new SavAct("Aarusha GP", "1BM23CS005", 1000);

CurAct curacc = new CurAct("Aarusha GP", "1BM23CS005", 500);

System.out.println("Name: Aarusha GP, USN: 1BM23CS005");

System.out.println("Savings Account: ");

savacc.deposit(500);

savacc.displayBal();

savacc.addInterest();

savacc.withdraw(200);

savacc.displayBal()

System.out.println("\nCurrent Account: ");

curacc.deposit(300);

curacc.displayBal();

curacc.withdraw(1000);

curacc.displayBal();

curacc.withdraw(200);

curacc.displayBal();

}

}

OUTPUT: