**3.MULTILEVEL INHERITANCE FOR BANK**

**import java.util.Scanner;**

**class Account {**

**protected int balance;**

**public Account(int initialBalance) {**

**if (initialBalance < 2000) {**

**System.out.println("Minimum balance should be 2000. Setting balance to 2000.");**

**this.balance = 2000;**

**} else {**

**this.balance = initialBalance;**

**}**

**}**

**public void displayBalance() {**

**System.out.println("Current balance: " + balance);**

**}**

**}**

**class Transaction extends Account {**

**public Transaction(int initialBalance) {**

**super(initialBalance);**

**}**

**public void deposit(int amount) {**

**balance += amount;**

**System.out.println("Deposited: " + amount);**

**}**

**public void withdraw(int amount) {**

**if (balance - amount < 0) {**

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

**} else {**

**balance -= amount;**

**System.out.println("Withdrawn: " + amount);**

**}**

**}**

**public void transfer(int amount) {**

**if (balance - amount < 0) {**

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

**} else {**

**balance -= amount;**

**System.out.println("Transferred: " + amount);**

**}**

**}**

**}**

**class Transfer extends Transaction {**

**public Transfer(int initialBalance) {**

**super(initialBalance);**

**}**

**public void performTransfer() {**

**Scanner scanner = new Scanner(System.in);**

**System.out.print("Enter amount to transfer: ");**

**int amount = scanner.nextInt();**

**transfer(amount);**

**}**

**}**

**class Withdraw extends Transaction {**

**public Withdraw(int initialBalance) {**

**super(initialBalance);**

**}**

**public void performWithdraw() {**

**Scanner scanner = new Scanner(System.in);**

**System.out.print("Enter amount to withdraw: ");**

**int amount = scanner.nextInt();**

**withdraw(amount);**

**}**

**}**

**public class Main {**

**public static void main(String[] args) {**

**int initialBalance = 2000;**

**Transfer transferAccount = new Transfer(initialBalance);**

**Withdraw withdrawAccount = new Withdraw(initialBalance);**

**Scanner scanner = new Scanner(System.in);**

**int choice;**

**while (true) {**

**transferAccount.displayBalance();**

**System.out.println("Enter choice: Transfer = 1, Withdraw = 2, Exit = 3");**

**choice = scanner.nextInt();**

**switch (choice) {**

**case 1:**

**transferAccount.performTransfer();**

**break;**

**case 2:**

**withdrawAccount.performWithdraw();**

**break;**

**case 3:**

**System.out.println("Exiting.");**

**return;**

**default:**

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

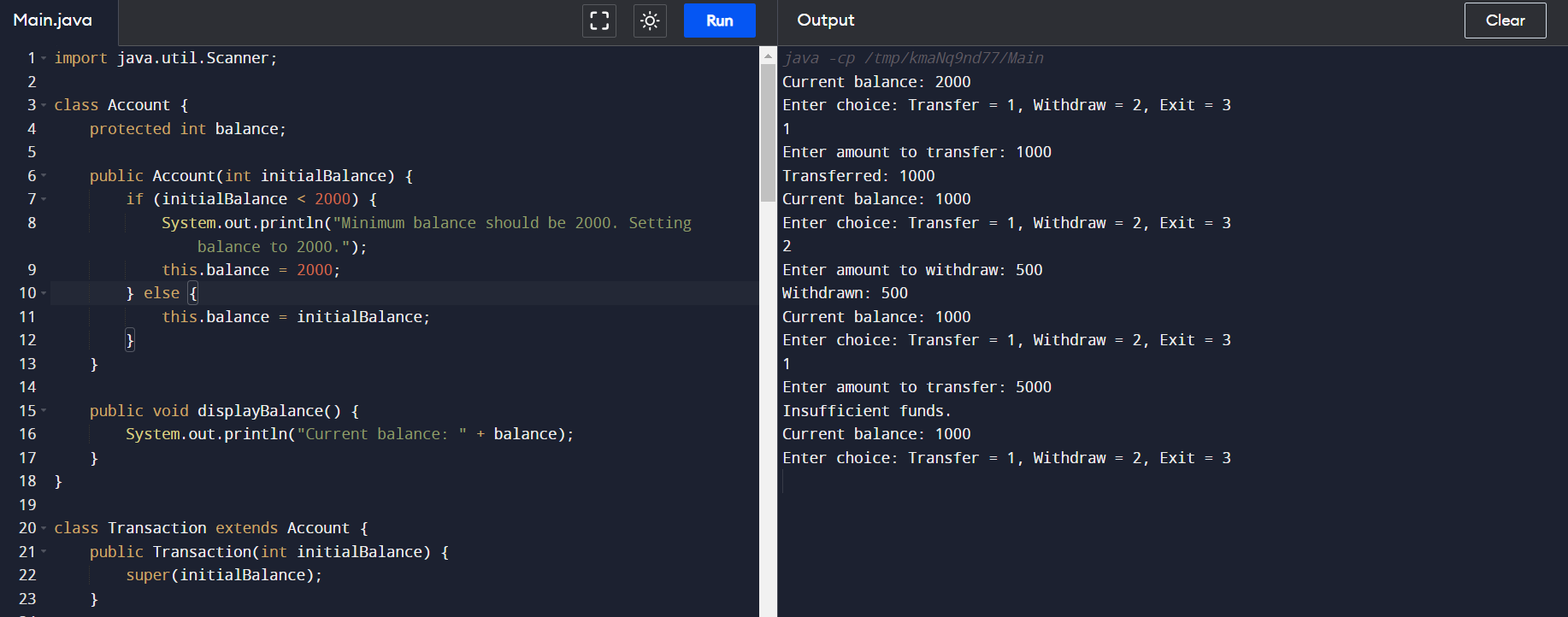
**}**

**}**

**}**

**}**

**OUTPUT:**

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