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import java.util.*;

// Base class
class BankAccount {
    protected String accountNumber;
    protected String holderName;
    protected double balance;
    protected ArrayList<Transaction> transactions = new ArrayList<>();

    public BankAccount(String accountNumber, String holderName, double initialBalance) {
        this.accountNumber = accountNumber;
        this.holderName = holderName;
        this.balance = initialBalance;
    }

    public void deposit(double amount) {
        if (amount > 0) {
            balance += amount;
            transactions.add(new Transaction("Deposit", amount, balance));
            System.out.println("Deposited: Rs." + amount);
        } else {
            System.out.println("Invalid deposit amount.");
        }
    }

    public void withdraw(double amount) throws InsufficientBalanceException {
        if (amount > balance) {
            throw new InsufficientBalanceException("Insufficient balance for withdrawal.");
        } else if (amount <= 0) {
            System.out.println("Invalid withdrawal amount.");
        } else {
            balance -= amount;
            transactions.add(new Transaction("Withdraw", amount, balance));
            System.out.println("Withdrawn: Rs." + amount);
        }
    }

    public double getBalance() {
        return balance;
    }

    public void printAccountDetails() {
        System.out.println("\n--- Account Details ---");
        System.out.println("Account No: " + accountNumber);
        System.out.println("Holder Name: " + holderName);
        System.out.println("Balance: Rs." + balance);
    }

    public void printMiniStatement() {
        System.out.println("\n--- Mini Statement ---");
        if (transactions.isEmpty()) {
            System.out.println("No transactions yet.");
        } else {
            for (Transaction t : transactions) {

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        t.printTransaction();
    }
}

// Inherited class for Savings Account
class SavingsAccount extends BankAccount {
    public SavingsAccount(String accountNumber, String holderName, double
initialBalance) {
        super(accountNumber, holderName, initialBalance);
    }
}

// Inherited class for Current Account
class CurrentAccount extends BankAccount {
    public CurrentAccount(String accountNumber, String holderName, double
initialBalance) {
        super(accountNumber, holderName, initialBalance);
    }
}

// Transaction class
class Transaction {
    private String type;
    private double amount;
    private double postBalance;

    public Transaction(String type, double amount, double postBalance) {
        this.type = type;
        this.amount = amount;
        this.postBalance = postBalance;
    }

    public void printTransaction() {
        System.out.printf("%-10s Rs.%-10.2f Balance: Rs.%.2f\n", type, amount,
postBalance);
    }
}

// Custom exception
class InsufficientBalanceException extends Exception {
    public InsufficientBalanceException(String message) {
        super(message);
    }
}

// Main class
public class BankSystem {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        BankAccount account = null;

        System.out.println("Welcome to Bank Account Simulation");
        System.out.print("Enter Account Number: ");
    }
}

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String accNo = sc.nextLine();
System.out.print("Enter Holder Name: ");
String name = sc.nextLine();
System.out.print("Enter Initial Balance: ");
double initialBalance = sc.nextDouble();
sc.nextLine(); // consume newline

System.out.print("Enter Account Type (savings/current): ");
String type = sc.nextLine().toLowerCase();

if (type.equals("savings")) {
    account = new SavingsAccount(accNo, name, initialBalance);
} else if (type.equals("current")) {
    account = new CurrentAccount(accNo, name, initialBalance);
} else {
    System.out.println("Invalid account type. Exiting.");
    return;
}

int choice;
do {
    System.out.println("\n1. Deposit");
    System.out.println("2. Withdraw");
    System.out.println("3. Check Balance");
    System.out.println("4. Mini Statement");
    System.out.println("5. Account Details");
    System.out.println("0. Exit");
    System.out.print("Enter choice: ");
    choice = sc.nextInt();

    try {
        switch (choice) {
            case 1:
                System.out.print("Enter deposit amount: ");
                double dep = sc.nextDouble();
                account.deposit(dep);
                break;
            case 2:
                System.out.print("Enter withdrawal amount: ");
                double wit = sc.nextDouble();
                account.withdraw(wit);
                break;
            case 3:
                System.out.println("Current Balance: Rs." +
account.getBalance());
                break;
            case 4:
                account.printMiniStatement();
                break;
            case 5:
                account.printAccountDetails();
                break;
            case 0:
                System.out.println("Thank you for using the Bank System.");
                break;
        }
    }
}

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        default:
            System.out.println("Invalid choice.");
        }
    } catch (InsufficientBalanceException e) {
        System.out.println("Error: " + e.getMessage());
    }

} while (choice != 0);

sc.close();
}
}
```