**Exercise 4: Implementing the Adapter Pattern**

**Code:**

interface PaymentProcessor {

void processPayment(double amount);

}

class PayPalGateway {

public void makePayment(double amount) {

System.out.println("Payment of Rs" + amount + " made using PayPal");

}

}

class StripeGateway {

public void payAmount(double amount) {

System.out.println("Payment of Rs" + amount + " made using Stripe");

}

}

class PayPalAdapter implements PaymentProcessor {

private PayPalGateway payPalGateway;

public PayPalAdapter(PayPalGateway payPalGateway) {

this.payPalGateway = payPalGateway;

}

@Override

public void processPayment(double amount) {

payPalGateway.makePayment(amount);

}

}

class StripeAdapter implements PaymentProcessor {

private StripeGateway stripeGateway;

public StripeAdapter(StripeGateway stripeGateway) {

this.stripeGateway = stripeGateway;

}

@Override

public void processPayment(double amount) {

stripeGateway.payAmount(amount);

}

}

public class AdapterPatternExample {

public static void main(String[] args) {

PaymentProcessor paypalProcessor = new PayPalAdapter(new PayPalGateway());

PaymentProcessor stripeProcessor = new StripeAdapter(new StripeGateway());

paypalProcessor.processPayment(1200.0);

stripeProcessor.processPayment(2200.0);

}

}

**Output:**

