**Adapter Pattern Example**

**Main.java**

package adapterpattern;

public class Main {

    public static void main(String[] args) {

        // Using RazorPayGateway directly

        RazorPayGateway razorPay = new RazorPayGateway();

        razorPay.makeRazorPayment(100.0);

        // Using PayPalGateway through the adapter

        PayPalGateway payPal = new PayPalGateway();

        PaymentProcessor payPalAdapter = new PayPalAdapter(payPal);

        payPalAdapter.processPayment(200.0);

    }

}

**PaymentProcessor.java**

package adapterpattern;

public interface PaymentProcessor {

    void processPayment(double amount);

}

**PayPalAdapter.java**

package adapterpattern;

public class PayPalAdapter implements PaymentProcessor {

    private PayPalGateway payPalGateway;

    public PayPalAdapter(PayPalGateway payPalGateway) {

        this.payPalGateway = payPalGateway;

    }

    @Override

    public void processPayment(double amount) {

        payPalGateway.sendPayment(amount);

    }

}

**PayPalGateway.java**

package adapterpattern;

public class PayPalGateway {

    public void sendPayment(double amount) {

        System.out.println("Processing PayPal payment of $" + amount);

    }

}

**RazorPayAdapter.java**

package adapterpattern;

public class RazorPayAdapter implements PaymentProcessor {

    private RazorPayGateway razorPayGateway;

    public RazorPayAdapter(RazorPayGateway razorPayGateway) {

        this.razorPayGateway = razorPayGateway;

    }

    @Override

    public void processPayment(double amount) {

        razorPayGateway.makeRazorPayment(amount);

    }

}

**RazorPapGateway.java**

//

package adapterpattern;

public class RazorPayGateway {

    public void makeRazorPayment(double amount) {

        System.out.println("Processing Razor payment of $" + amount);

    }

}

