**Exercise 8:**

**Implementing the Strategy Pattern:**

PaymentStrategy.java:

**package** strategy;

**public** **interface** PaymentStrategy {

**void** pay(**int** amount);

}

PayPalPayment.java:

**package** strategy;

**public** **class** PayPalPayment **implements** PaymentStrategy{

**public** **void** pay(**int** amount)

{

System.***out***.println("Paid ₹"+ amount+ " using PayPal");

}

}

CreditCardPayment.java:

**package** strategy;

**public** **class** CreditCardPayment **implements** PaymentStrategy{

**public** **void** pay(**int** amount)

{

System.***out***.println("Paid ₹"+amount+" using Credit Card");

}

}

PaymentContext.java:

**package** strategy;

**public** **class** PaymentContext {

**private** PaymentStrategy strategy;

**public** **void** setPaymentStrategy(PaymentStrategy strategy)

{

**this**.strategy=strategy;

}

**public** **void** pay(**int** amount)

{

**if**(strategy==**null**)

{

System.***out***.println("Please select a payment method");

}

**else**

{

strategy.pay(amount);

}

}

}

StrategyTest.java

**package** strategy;

**public** **class** StrategyTest {

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

{

PaymentContext context=**new** PaymentContext();

context.setPaymentStrategy(**new** CreditCardPayment());

context.pay(2000);

context.setPaymentStrategy(**new** PayPalPayment());

context.pay(3000);

}

}

**Output:**

