**package** ObserverPattern;

**public** **interface** Stock {

**void** register(StockObserver observer);

**void** deregister(StockObserver observer);

**void** notifyObservers();

}

**package** ObserverPattern;

**import** java.util.\*;

**public** **class** StockMarket **implements** Stock {

**private** List<StockObserver> observers = **new** ArrayList<>();

**private** String stockName;

**private** **double** stockPrice;

**public** **void** setStock(String name, **double** price) {

**this**.stockName = name;

**this**.stockPrice = price;

notifyObservers();

}

**public** **void** register(StockObserver observer) {

observers.add(observer);

}

**public** **void** deregister(StockObserver observer) {

observers.remove(observer);

}

**public** **void** notifyObservers() {

**for** (StockObserver observer : observers) {

observer.update(stockName, stockPrice);

}

}

}

**package** ObserverPattern;

**public** **interface** StockObserver {

**void** update(String stockName, **double** price);

}

**package** ObserverPattern;

**public** **class** MobileApp **implements** StockObserver {

**private** String appName;

**public** MobileApp(String appName) {

**this**.appName = appName;

}

**public** **void** update(String stockName, **double** price) {

System.***out***.println(appName + " Mobile App - " + stockName + " stock is now ₹" + price);

}

}

**package** ObserverPattern;

**public** **class** WebApp **implements** StockObserver {

**private** String appName;

**public** WebApp(String appName) {

**this**.appName = appName;

}

**public** **void** update(String stockName, **double** price) {

System.***out***.println(appName + " Web App - " + stockName + " stock is now ₹" + price);

}

}

**package** ObserverPattern;

**public** **class** Main {

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

StockMarket stockMarket = **new** StockMarket();

StockObserver observer1 = **new** MobileApp("GrowX");

StockObserver observer2 = **new** WebApp("MoneyView");

stockMarket.register(observer1);

stockMarket.register(observer2);

stockMarket.setStock("C-1", 3875.50);

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

stockMarket.deregister(observer2);

stockMarket.setStock("C-2", 1425.75);

}

}  
  
**OUTPUT:**

