

ReserveAndPickup.java

```
1 public interface ReserveAndPickup {
2     boolean checkAvailability(String productId, String storeId);
3     void reserveProduct(String productId, String storeId);
4 }
```

BestBuyReserveAndPickup.java

```
1 /**
2  * BestBuyReserveAndPickup
3  */
4 public class BestBuyReserveAndPickup implements ReserveAndPickup {
5
6     public boolean checkAvailability(String productId, String storeId) {
7         // Always return true for simplicity
8         return true;
9     }
10
11     public void reserveProduct(String productId, String storeId) {
12
13         if(checkAvailability(productId, storeId)){
14             System.out.println("Reserved product " + productId + " at store " + storeId)
15         ;
16         }
17         else{
18             System.out.println("Failed to reserve product. Product unavailable.");
19         }
20     }
21 }
```

There is more code below this

OnlineOrdering.java

```
1 public interface OnlineOrdering {
2     boolean checkAvailability(String productId, String zipCode);
3     void placeOrder(String productId, String zipCode);
4 }
```

OnlineOrderingAdapter.java

```
1 /**
2  * OnlineOrderingAdapter
3  */
4 public class OnlineOrderingAdapter implements OnlineOrdering {
5
6     private ReserveAndPickup RandP;
7
8     public OnlineOrderingAdapter(ReserveAndPickup reserveAndPickup) {
9         this.RandP = reserveAndPickup;
10    }
11
12    public boolean checkAvailability(String productId, String zipCode) {
13        // Map the zip code to a store ID (for simplicity, we assume all products are
14        // available in all stores)
15        String storeId = zipCodeToStoreId(zipCode);
16        // Check availability using the ReserveAndPickup interface
17        return RandP.checkAvailability(productId, storeId);
18    }
19
20    public void placeOrder(String productId, String zipCode) {
21        // Map the zip code to a store ID
22        String storeId = zipCodeToStoreId(zipCode);
23        // Reserve the product using the ReserveAndPickup interface
24        RandP.reserveProduct(productId, storeId);
25        System.out.println("Placed online order for product " + productId + " with
26        pickup at store " + storeId);
27    }
28
29    private String zipCodeToStoreId(String zipCode) {
30        // For simplicity, we just use the zip code as the store ID
31        return zipCode;
32    }
33 }
```

There is more code below this.

Main.java

```
1 public class Main {
2     public static void main(String[] args) {
3         ReserveAndPickup reserveAndPickup = new BestBuyReserveAndPickup();
4         OnlineOrdering onlineOrdering = new OnlineOrderingAdapter(reserveAndPickup);
5
6         // Simulate a customer checking availability and placing an order
7         String [] productId = new String[] {"0001","0002","0003","0004","0005","0006"};
8         String [] zipCode = new String[] {"23047","23054","23099","23032","22347","20987"};
9
10        for (int i = 0; i < zipCode.length; i++) {
11
12            if (onlineOrdering.checkAvailability(productId[i], zipCode[i])) {
13                onlineOrdering.placeOrder(productId[i], zipCode[i]);
14            } else {
15                System.out.println("Product " + productId + "is not available for online
16                ordering in ZIP code" + zipCode);
17            }
18        }
19    }
20 }
21 }
```

There is no more code below this.