

```
1 package acart;
2
3 import ashop.Item;
4 import ashop.Medicine;
5 import ashop.Product;
6 import ashop.Wine;
7 import org.junit.jupiter.api.Test;
8
9 import static org.junit.jupiter.api.Assertions.*;
10
11 class ShoppingCartTest {
12
13     @Test
14     public void medicineCanBeAddedToCart() {
15         ShoppingCart shoppingCart = new ShoppingCart();
16
17         shoppingCart.add(new Medicine("Test", 5.0));
18
19         assertEquals(1, shoppingCart.getItemCount());
20     }
21
22     @Test
23     public void wineCanBeAddedToCart() {
24         ShoppingCart shoppingCart = new ShoppingCart();
25
26         shoppingCart.add(new Wine("Test", 5.0, 1.0));
27
28         assertEquals(1, shoppingCart.getItemCount());
29     }
30
31     @Test
32     public void shouldReportFinalPrice() {
33         ShoppingCart shoppingCart = new ShoppingCart();
34
35     }
```

```

35  shoppingCart.add(new Medicine("Ibuprofen", 1.0));
36  shoppingCart.add(new Medicine("Aspirin", 2.0));
37  shoppingCart.add(new Wine("Voruta", 5.0, 1.0));
38
39  assertEquals(11.2, shoppingCart.getTotalPrice(), 0.01);
40  }
41
42  @Test
43  public void shouldApplyDiscount() {
44      ShoppingCart shoppingCart = new ShoppingCart(
45          new TestDiscountStrategy()
46      );
47
48      shoppingCart.add(new TestProduct("", 0.0));
49
50      assertEquals(0.5, shoppingCart.getTotalPrice());
51  }
52
53  class TestProduct extends Item {
54
55      public TestProduct(String name, double basePrice) {
56          super(name, basePrice);
57      }
58
59      public double getTotalPrice() {
60          return 1;
61      }
62  }
63
64  class TestDiscountStrategy implements DiscountStrategy {
65
66      public double applyDiscount(double totalPrice) {
67          return totalPrice * 0.5;
68      }

```

69       }

70

71    }