

```
1 namespace IdentifiableObject
2 {
3     public class Tests
4     {
5         private Bag _b1;
6         private Bag _b2;
7         private Item _shield;
8         private Item _shovel;
9
10        [SetUp]
11        public void Setup()
12        {
13            _b1 = new Bag(new string[] { "104776473" }, "Thang's bag",
14                           "student");
15            _b2 = new Bag(new string[] { "1" }, "bag 2", "this is a bag");
16            _shield = new Item(new string[] { "shield" }, "a shield",
17                               "Shield level 1");
18            _shovel = new Item(new string[] { "shovel" }, "a shovel",
19                               "Shovel level 2");
20        }
21
22        [Test]
23        public void TestBagLocatesItems()
24        {
25            _b1.Inventory.Put(_shield);
26            Assert.AreEqual(_b1.Locate("shield"), _shield);
27        }
28
29        [Test]
30        public void TestBagLocatesItself()
31        {
32            Assert.AreEqual(_b1.Locate("104776473"), _b1);
33        }
34
35        [Test]
36        public void TestBagLocateNothing()
37        {
38            Assert.AreEqual(_b1.Locate("pizza"), null);
39        }
40
41        [Test]
42        public void TestBagFullDescription()
43        {
44            _b1.Inventory.Put(_shield);
45            _b1.Inventory.Put(_shovel);
46            Assert.AreEqual(_b1.FullDescription, "In the Thang's bag you
47                           can see:\na shield (shield)\na shovel (shovel)\n");
48        }
49    }
50 }
```

```
46     [Test]
47     public void TestBagInBag()
48     {
49         _b1.Inventory.Put(_b2);
50         _b2.Inventory.Put(_shield);
51         Assert.AreEqual(_b1.Locate(_b2.FirstId), _b2);
52         Assert.AreEqual(_b1.Locate(_shovel.FirstId), null);
53     }
54
55     [Test]
56     public void TestBagInBag_PrivilegedItem()
57     {
58         _b1.Inventory.Put(_b2);
59         _b2.PrivilegeEscalation("2024");
60         Assert.AreEqual(_b1.Locate("2024"), null);
61     }
62 }
63 }
```