```
1 public class Bag : Item
2 {
 3
        private Inventory _inventory;
 4
        public Bag(string[] ids, string name, string desc)
 5
 6
            : base(ids, name, desc)
 7
        {
            _inventory = new Inventory();
 8
 9
        }
10
11
        public override string FullDescription
12
13
            get
14
            {
                return $"In the {Name} you see:\n{_inventory.ItemList}";
15
16
            }
17
        }
18
19
        public Inventory Inventory
20
        {
21
            get { return _inventory; }
22
        }
23
       public GameObject Locate(string id)
24
25
        {
26
            if (AreYou(id))
27
            {
28
                return this;
            }
29
30
31
           return _inventory.Fetch(id);
32
        }
33 }
34
```

```
1 using NUnit.Framework;
 2
 3 [TestFixture]
 4 public class BagTests
 5 {
       private Bag _outerBag;
 6
 7
       private Bag _innerBag;
 8
       private Item _gem;
 9
10
        [SetUp]
       public void Setup()
11
12
            _outerBag = new Bag(new string[] { "outer bag" }, "a large bag", "A →
13
              large outer bag.");
            _innerBag = new Bag(new string[] { "inner bag" }, "a small bag", "A →
14
               small inner bag.");
            _gem = new Item(new string[] { "gem" }, "a shiny gem", "A shiny
15
              precious gem.");
16
            _outerBag.Inventory.Put(_innerBag);
17
           _innerBag.Inventory.Put(_gem);
       }
18
19
20
        [Test]
       public void TestBagLocatesItems()
21
22
23
            Assert.AreEqual(_gem, _innerBag.Locate("gem"));
       }
24
25
        [Test]
26
27
       public void TestBagLocatesItself()
28
       {
            Assert.AreEqual(_outerBag, _outerBag.Locate("outer bag"));
29
30
       }
31
32
        [Test]
       public void TestBagLocatesNothing()
33
34
35
            Assert.IsNull(_outerBag.Locate("gem"));
       }
36
37
       [Test]
38
        public void TestBagFullDescription()
39
40
41
            string expectedDescription = "In the a small bag you see:\n\ta
              shiny gem (gem)";
            Assert.AreEqual(expectedDescription, _innerBag.FullDescription);
42
       }
43
44
        [Test]
45
```

```
...P\swinadventure 2\IdentifiableObjectTests\Bagtests.cs
```

2

