```
1 using System;
 2 using System.Collections.Generic;
 3 using System.Linq;
 4 using System.Text;
 5 using System.Threading.Tasks;
 7 namespace SwinAdventure
 8 {
9
        public class IdentifiableObject
10
            private List<string> _identifiers;
11
12
            public IdentifiableObject(string[] idents)
13
14
            {
                _identifiers = new List<string>();
15
16
                foreach (string id in idents)
17
18
                    _identifiers.Add(id.ToLower());
19
                }
            }
20
21
22
            public bool AreYou(string id)
23
24
                return _identifiers.Contains(id.ToLower());
            }
25
26
            public string FirstId
27
28
29
                get
                {
30
                    if (_identifiers.Count > 0)
31
32
                    {
33
                        return _identifiers[0];
                    }
34
35
                    else
36
                    {
37
                        return "";
38
                    }
39
                }
            }
40
41
            public void AddIdentifier(string id)
42
43
44
                _identifiers.Add(id.ToLower());
45
            }
46
        }
47 }
48
```

```
... ject \verb| IdentifiableObjectTest \verb| IdentifiableObjectTest.cs| \\
```

```
1 using SwinAdventure;
 2
 3 namespace IdentifiableObjectTest
 4 {
 5
       public class Tests
 6
 7
            [SetUp]
 8
            public void Setup()
 9
10
            }
11
12
            [Test]
13
14
            public void TestAreYou()
15
                IdentifiableObject obj = new IdentifiableObject(new string[]
16
                  {"fred", "bob"});
17
18
                bool result1 = obj.AreYou("fred");
                bool result2 = obj.AreYou("bob");
19
20
21
                Assert.IsTrue(result1);
22
                Assert.IsTrue(result2);
            }
23
24
25
            [Test]
            public void TestNotAreYou()
26
27
                IdentifiableObject obj = new IdentifiableObject(new string[]
28
                  { "fred", "bob" });
29
                bool result1 = obj.AreYou("wilma");
30
31
                bool result2 = obj.AreYou("boby");
32
33
                Assert.IsFalse(result1);
                Assert.IsFalse(result2);
34
35
            }
36
            [Test]
37
            public void TestCaseSensitive()
38
39
40
                IdentifiableObject obj = new IdentifiableObject(new string[]
                  { "fred", "bob" });
41
42
                bool result1 = obj.AreYou("FRED");
                bool result2 = obj.AreYou("bOB");
43
44
45
                Assert.IsTrue(result1);
                Assert.IsTrue(result2);
46
```

```
47
48
49
            [Test]
            public void TestFirstID()
50
                IdentifiableObject obj = new IdentifiableObject(new string[]
52
                  { "fred", "bob" });
53
54
                string firstID = obj.FirstId;
55
                Assert.AreEqual("fred", firstID);
56
            }
57
58
            [Test]
59
            public void TestFirstIDWithNoIDs()
60
61
                IdentifiableObject obj = new IdentifiableObject(new string[]
62
                  { });
63
                string firstID = obj.FirstId;
64
65
66
                Assert.AreEqual("", firstID);
            }
67
68
            [Test]
69
70
            public void TestAddIdentifier()
71
            {
72
                IdentifiableObject obj = new IdentifiableObject(new string[]
                  { "fred", "bob" });
73
74
                obj.AddIdentifier("wilma");
75
76
                Assert.IsTrue(obj.AreYou("fred"));
                Assert.IsTrue(obj.AreYou("bob"));
77
                Assert.IsTrue(obj.AreYou("wilma"));
78
79
            }
80
        }
81 }
```

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...ject\IdentifiableObjectTest\IdentifiableObjectTest.cs

