

Program.cs

..\COS20007\Week_2\2.4P - Answers\Iteration1\Program.cs

1

```
1 namespace Iteration1
2 {
3     internal class Program
4     {
5         static void Main(string[] args)
6         {
7             Console.WriteLine("Iteration1");
8         }
9     }
10}
11
```

IdentifiableObject.cs

...eek_2\2.4P - Answers\Iteration1\IdentifiableObject.cs

1

```
1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Text;
5  using System.Threading.Tasks;
6
7  namespace Iteration1
8  {
9      public class IdentifiableObject
10     {
11         private List<string> _identifiers = new List<string>();
12
13         public IdentifiableObject(string[] idents)
14         {
15             for (int i = 0; i < idents.Length; i++)
16             {
17                 _identifiers.Add(idents[i].ToLower());
18             }
19         }
20         public bool AreYou(string id)
21         {
22             if (_identifiers.Contains(id.ToLower()))
23             {
24                 return true;
25             }
26             return false;
27         }
28         public string FirstId()
29         {
30             if (_identifiers.Any())
31             {
32                 return _identifiers.First();
33             }
34             return "";
35         }
36         public void AddIdentifier(string id)
37         {
38             _identifiers.Add(id.ToLower());
39         }
40     }
41 }
42 }
```

UnitTest1.cs

..._2\2.4P - Answers\TestIdentifiableObject\UnitTest1.cs 1

```
1 using Iteration1;
2
3 namespace TestIdentifiableObject
4 {
5     public class Tests
6     {
7         private IdentifiableObject myObject;
8
9         [SetUp]
10        public void SetUp()
11        {
12            myObject = new IdentifiableObject(new string[] { "fred",
13                "bob" });
14        }
15
16        [Test]
17        public void TestAreYou()
18        {
19            Assert.That(myObject.AreYou("bob"), Is.EqualTo(true));
20            Assert.That(myObject.AreYou("fred"), Is.EqualTo(true));
21
22            Assert.Pass();
23        }
24
25        [Test]
26        public void TestNotAreYou()
27        {
28            Assert.That(myObject.AreYou("wilma"), Is.EqualTo(false));
29            Assert.That(myObject.AreYou("boby"), Is.EqualTo(false));
30
31            Assert.Pass();
32        }
33
34        [Test]
35        public void TestCaseSensitive()
36        {
37            Assert.That(myObject.AreYou("FRED"), Is.EqualTo(true));
38            Assert.That(myObject.AreYou("bOB"), Is.EqualTo(true));
39
40            Assert.Pass();
41        }
42
43        [Test]
44        public void TestFirstId()
45        {
46            Assert.That(myObject.FirstId(), Is.EqualTo("fred"));
47
48            Assert.Pass();
49        }
50    }
51}
```

```
49
50      [Test]
51      public void TestFirstIdWithoutIDs()
52      {
53          IdentifiableObject myObject = new IdentifiableObject(new string []
54              [] { });
55
56          Assert.That(myObject.FirstId(), Is.EqualTo(""));
57
58          Assert.Pass();
59      }
60
61      [Test]
62      public void TestAddId()
63      {
64          myObject.AddIdentifier("wilma");
65
66          Assert.That(myObject.AreYou("fred"), Is.EqualTo(true));
67          Assert.That(myObject.AreYou("bob"), Is.EqualTo(true));
68          Assert.That(myObject.AreYou("wilma"), Is.EqualTo(true));
69
70          Assert.Pass();
71      }
72 }
```

Screenshot of Test Passing

The screenshot shows a Microsoft Visual Studio interface with the following details:

- File Bar:** File, Edit, View, Git, Project, Build, Debug, Test, Analyze, Tools, Extensions, Window, Help.
- Toolbars:** Standard, Debug, Windows, Help.
- Solution Explorer:** Shows two projects: Iteration1 and TestIdentifiableObject. Iteration1 contains Dependencies, C# IdentifiableObject.cs, and C# Program.cs. TestIdentifiableObject contains Dependencies and UnitTest1.cs.
- Test Explorer:** Displays 6 tests, all of which have passed (indicated by green checkmarks). The total duration is 591 ms.
- Output Window:** Shows build logs indicating a successful build with 2 succeeded, 0 failed, 0 up-to-date, and 0 skipped. The build took 05.558 seconds.
- Code Editor:** The UnitTest1.cs file is open, containing test code for the IdentifiableObject class. It includes a TestSetup method, three TestAreYou methods (all passing), and a TestCaseSensitive method (not shown in the screenshot).