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using SwinAdventure;
using NUnit.Framework;

namespace SwinAdventureTest
{
    public class IdentifiableObjectTests
    {
        private IdentifiableObject id;
        private IdentifiableObject id_for_final_test;
        private IdentifiableObject idWithNoIDs;
        [SetUp]
        public void Setup()
        {
            id = new IdentifiableObject(new string[] { "gia", "hieu", "mike",
                "bond" });
            idWithNoIDs = new IdentifiableObject(new string[] { });
            id_for_final_test = new IdentifiableObject(new string[] { "5520",
                "gia", "hieu"});
        }

        [Test]
        //First test
        public void TestAreYou()
        {
            // Assert that the object can correctly identify itself with the
            // given identifiers
            Assert.IsTrue(id.AreYou("gia"));
            Assert.IsTrue(id.AreYou("hieu"));
        }
        //Second test
        [Test]
        public void TestNotAreYou()
        {
            Assert.IsFalse(id.AreYou("Jack"));
            Assert.IsFalse(id.AreYou("music"));
        }
        //Thrd test
        [Test]
        public void TestCaseSensitive()
        {
            Assert.IsTrue(id.AreYou("MIKE"));
            Assert.IsTrue(id.AreYou("bOnD"));
        }
        //Fourth test
        [Test]
        public void TestFirstID()
        {
            Assert.AreEqual("gia", id.FirstID);
        }
    }
}
```

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//Fifth test
[Test]
public void TestFirstIDWithNoIDs()
{
    Assert.AreEqual("", idWithNoIDs.FirstID);
}

//Sixth test
[Test]
public void TestAddID()
{
    id.AddIdentifier("Seekers");
    id.AddIdentifier("Athol");
    id.AddIdentifier("Keith");
    id.AddIdentifier("Bruce");
    Assert.IsTrue(id.AreYou("Seekers"));
    Assert.IsTrue(id.AreYou("Athol"));
    Assert.IsTrue(id.AreYou("Keith"));
    Assert.IsTrue(id.AreYou("Bruce"));
}

//Final test
[Test]
public void TestPrivilegeEscalation()
{
    // Act: escalate privilege using the correct pin (last 4 digits of
    // student ID)
    id_for_final_test.PrivilegeEscalation("5520");

    Assert.That(id_for_final_test.FirstID, Is.EqualTo("COS20007"));
}

}

}
```