

Input

Source Code:

```
namespace MainProject
{
    class MainClass
    {
        public void MainMethod()
        {
            TestProject.TestClass obj1 = new TestProject.TestClass();
        }
    }
}
+
using System;
namespace TestProject
{
    public class TestClass
    {
        private static readonly Random random = new Random();
        private static readonly object syncLock = new object();
        public bool circuit()
        {
            lock (syncLock)
            {
                if (random.NextDouble() < 0.5)
                {
                    return true;
                }
                else
                {
                    return false;
                }
            }
        }
        public bool gm()
        {
            lock (syncLock)
            {
                if (random.NextDouble() < 0.5)
                {
                    return true;
                }
                else
                {
                    return false;
                }
            }
        }
        public bool org()
        {
            lock (syncLock)
            {
                if (random.NextDouble() < 0.5)
                {
                    return true;
                }
            }
        }
    }
}
```

```

        else
        {
            return false;
        }
    }
}
public bool rd1()
{
    lock (syncLock)
    {
        if (random.NextDouble() < 0.5)
        {
            return true;
        }
        else
        {
            return false;
        }
    }
}
public bool rd2()
{
    lock (syncLock)
    {
        if (random.NextDouble() < 0.5)
        {
            return true;
        }
        else
        {
            return false;
        }
    }
}
}
}

```

Class Name:

MainClass

Method Name:

MainMethod

Path Constraint:

(!obj1.rd1() || !obj1.rd2()) && obj1.circuit() && obj1.rd2() && !obj1.grn() && !obj1.org() && !(obj1.rd1())

Output

Path Constraint:

(!obj1.rd2())&&obj1.circuit()&&obj1.rd2()&&!obj1.grn()&&!obj1.org()&&obj1.rd1()

Results:

Unsatisfiable

Path Constraint:

(obj1.rd1())&&obj1.circuit()&&obj1.rd2()&&!obj1.grn()&&!obj1.org()&&obj1.rd1()

Results:

Unsatisfiable

Execution Time: 638 ms