Swinburne University of Technology

COS20007 Object Oriented Programming

# 2.2P - Counter Class

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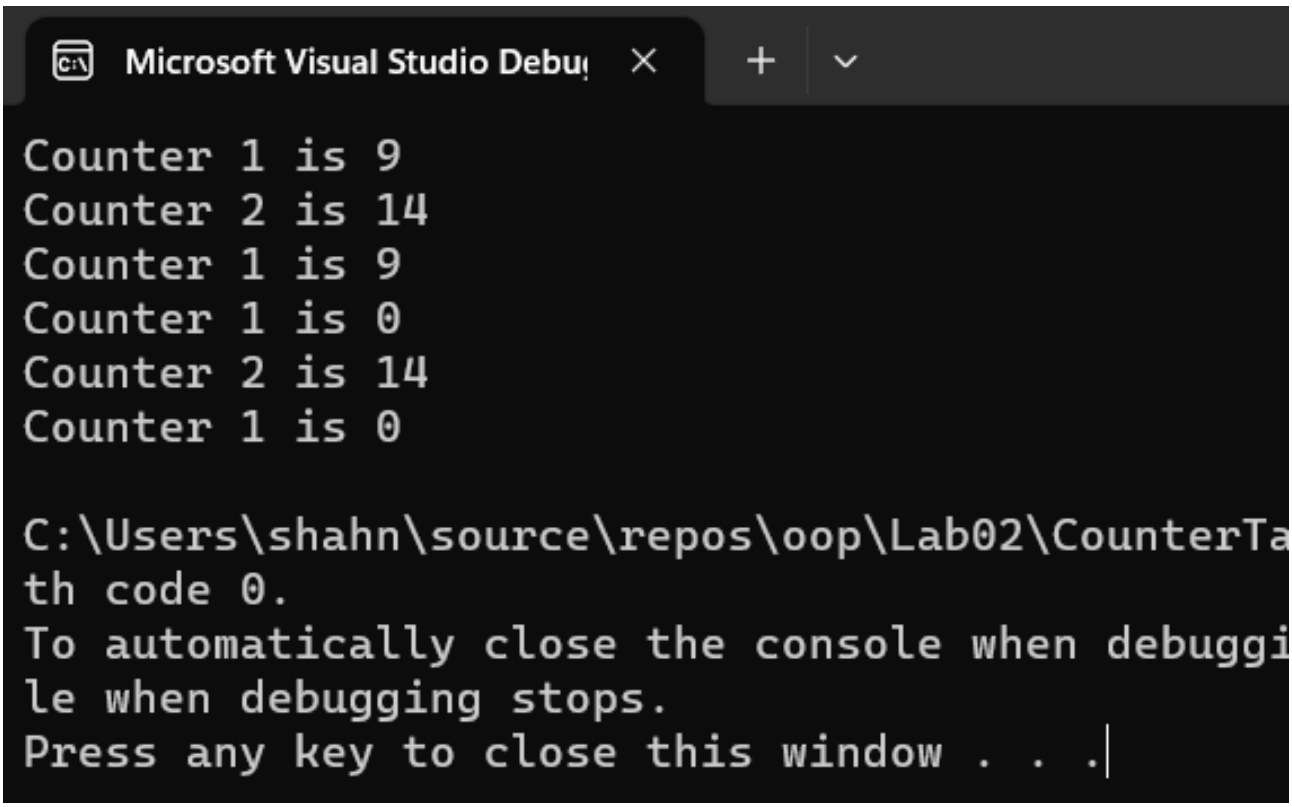
```
using System;

namespace CounterTask
{
    class MainClass
    {
        private static void PrintCounters(Counter[] counters)
        {
            foreach (Counter c in counters)
            {
                Console.WriteLine("{0} is {1}", c.Name, c.Ticks);
            }
        }
        public static void Main(string[] args)
        {
            Counter[] myCounters = new Counter[3];
            int i;

            myCounters[0] = new Counter("Counter 1");
            myCounters[1] = new Counter("Counter 2");
            myCounters[2] = myCounters[0];

            for (i = 0; i < 9; i++)
            {
                myCounters[0].Increment();
            }
            for (i = 0; i < 14; i++)
            {
                myCounters[1].Increment();
            }

            PrintCounters(myCounters);

            myCounters[2].Reset();

            PrintCounters(myCounters);
        }
    }
}
```

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace CounterTask
{
    public class Counter
    {
        private int _count;
        private string _name;

        public string Name
        {
            get
            {
                return _name;
            }
            set
            {
                _name = value;
            }
        }
        public int Ticks
        {
            get
            {
                return _count;
            }
        }

        public Counter(string name)
        {
            _name = name;
            _count = 0;
        }

        public void Increment()
        {
            _count++;
        }

        public void Reset()
        {
            _count = 0;
        }
    }
}
```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Counter 2 is 14
Counter 1 is 9
Counter 1 is 0
Counter 2 is 14
Counter 1 is 0
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