Swinburne University of Technology

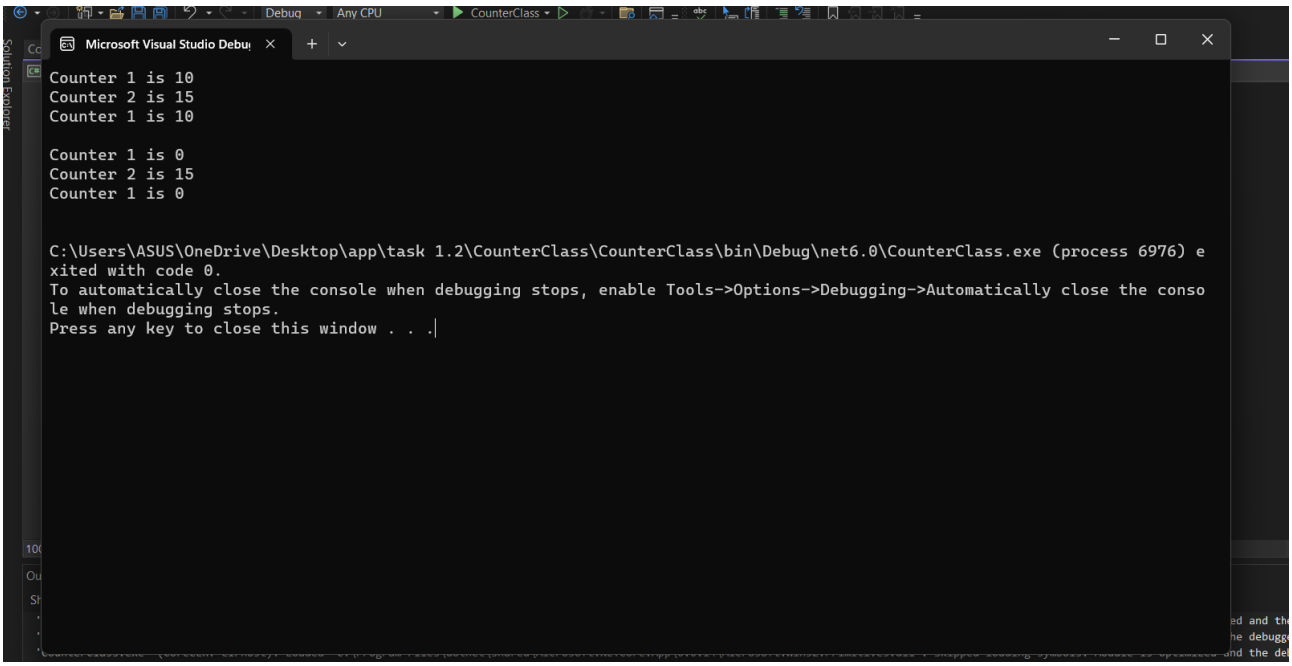
COS20007 Object Oriented Programming

2.2P - Counter Class

PDF generated at 00:28 on Wednesday 8th March, 2023

```
using System;

namespace CounterTask
{
    public 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[] myCounter = new Counter[3];
            int i;

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

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

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

            PrintCounters(myCounter);
            Console.ReadLine();

            myCounter[2].Reset();

            PrintCounters(myCounter);
            Console.ReadLine();
        }
    }
}
```

```
using System;
using System.Collections.Generic;
using System.Text;

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

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

        public void Increment()
        {
            _count++;
        }

        public void Reset()
        {
            _count = 0;
        }

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

        public int Ticks
        {
            get
            {
                return _count;
            }
        }
    }
}
```


Debug
Any CPU
CounterClass
Microsoft Visual Studio Debu
Counter 1 is 10
Counter 2 is 15
Counter 1 is 10
Counter 1 is 0
Counter 2 is 15
Counter 1 is 0
C:\Users\ASUS\OneDrive\Desktop\app\task 1.2\CounterClass\CounterClass\bin\Debug\net6.0\CounterClass.exe (process 6976) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .