

Program.cs

```
using System;
```

```
namespace CounterTask
```

```
{
```

```
    internal class Program
```

```
    {
```

```
        private static void PrintCounters(Counter[] myCounters)
```

```
        {
```

```
            foreach (Counter c in myCounters)
```

```
            {
```

```
                Console.WriteLine("{0} is {1}", c.Name, c.Ticks);
```

```
            }
```

```
        }
```

```
        static void Main(string[] args)
```

```
        {
```

```
            // Step 1: Let myCounters be an array of three Counter objects
```

```
            Counter[] myCounters = new Counter[3];
```

```
            // Step 2: myCounters[0] := new Counter with name "Counter 1"
```

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

```
            // Step 3: myCounters[1] := new Counter with name "Counter 2"
```

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

```
            // Step 4: myCounters[2] :=
```

```
            myCounters[2] = myCounters[0];
```

```

// Step 5: for i := 1 to 9
for (int i = 1; i <= 9; i++)
{
    // Step 6: Tell myCounters[0] to Increment
    myCounters[0].Increment();
}

// Step 7: for i := 1 to 14
for (int i = 1; i <= 14; i++)
{
    // Step 8: Tell myCounters[1] to Increment
    myCounters[1].Increment();
}

// Step 9: Tell Program to PrintCounters(myCounters)
PrintCounters(myCounters);

// Step 10: Tell myCounters[2] to Reset
myCounters[2].Reset(); // This will reset Counter 3

// Step 11: Tell Program to PrintCounters(myCounters)
PrintCounters(myCounters);
}
}
}

```

Counter.cs

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 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;

    }
}

}

}
```

```
Microsoft Visual Studio Debug Console
Counter 1 is 9
Counter 2 is 14
Counter 1 is 9
Counter 1 is 0
Counter 2 is 14
Counter 1 is 0

C:\Users\joshu\OneDrive\Desktop\COS20007_00P\CounterTask\CounterTask\bin\Debug\net8.0\CounterTask.exe (process 17500) exited with code 0 (0x0).
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 . . .
```