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2.2P

Counter.cs

```
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;
            }
        }
        public void ResetByDefault()
        {
            // unchecked allows a value that overflows int range without throwing an exception.
            unchecked
            {
                _count = (int)2147483647912;
```

```
            // value is beyond the max value of int
                    // This wraps around and results in a negative value.
                    // This does NOT crash the program.
                }
            }
        }
}
```

Program.cs

```
namespace CounterTask
{
    internal class Program
    {
        private static void PrintCounters(Counter[] counters)
        {
            foreach (Counter c in counters)
            {
                Console.WriteLine("{0} is {1}", c.Name, c.Ticks);
            }
        }
        public static void Main()
        {
            Counter[] myCounters = new Counter[3];
            myCounters[0] = new Counter("Counter 1");
            myCounters[1] = new Counter("Counter 2");
            myCounters[2] = myCounters[1];
            for (int i = 1; i <= 9; i++)
            {
                myCounters[0].Increment();
            }
            for (int i = 1; i <= 14; i++)
            {
                myCounters[1].Increment();
            }
            Program.PrintCounters(myCounters);
            myCounters[2].Reset();
            Program.PrintCounters(myCounters);
        }
    }
}
```

```
● ~/Desktop/OOPAssignments/P22/CounterTask > dotnet run
  Counter 1 is 9
  Counter 2 is 14
  Counter 2 is 14
  Counter 1 is 9
  Counter 2 is 0
  Counter 2 is 0
○ ~/Desktop/OOPAssignments/P22/CounterTask > █
```