## Pass task 2.2:

## Counter.cs file:

46 }

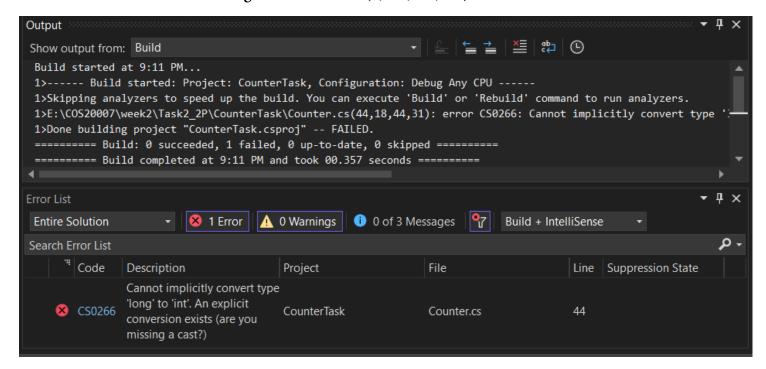
```
E:\COS20007\week2\Task2_2P\CounterTask\Counter.cs
1 public class Counter
2 {
 3
       private int _count;
 4
       private string _name;
 5
       public Counter(string name)
 6
 7
 8
            _name = name;
 9
           _{count} = 0;
       }
10
11
       public void Increment()
12
13
14
            _count++;
15
       }
16
17
       public void Reset()
18
19
            _{count} = 0;
20
       }
21
22
       public string Name
23
24
            get
25
            {
26
                return _name;
27
            }
28
            set
29
            {
30
                _name = value;
31
            }
32
       }
33
34
       public int Ticks
35
36
            get
37
            {
38
                return _count;
39
            }
40
       }
41
42
       //public void ResetByDefault()
43
       //{
       //
44
              _count = 2147483647473;
45
       //}
```

```
E:\COS20007\week2\Task2_2P\CounterTask\Program.cs
```

```
1 using System;
 2 namespace CounterTask
 3
   {
 4
        internal class Program
 5
 6
            private static void PrintCounters(Counter[] counters)
 7
                foreach (Counter c in counters)
 8
 9
                    Console.WriteLine("{0} is {1}", c.Name, c.Ticks);
10
                }
11
12
            }
13
            static void Main(string[] args)
14
15
                Counter[] myCounters= new Counter[3];
16
                myCounters[0] = new Counter("Counter 1");
17
                myCounters[1] = new Counter("Counter 2");
18
                myCounters[2] = myCounters[0];
19
20
                for(int i=1; i<10; i++)</pre>
21
22
                    myCounters[0].Increment();
23
                }
24
25
26
                for(int i=1; i<15; i++)</pre>
27
28
                    myCounters[1].Increment();
29
                }
30
31
                PrintCounters(myCounters);
                myCounters[2].Reset();
32
                PrintCounters(myCounters);
33
            }
34
35
       }
36 }
37
```

13. Tell the Counter to increase the count value. Does the code still run without any bugs/crash? What is the reason behind? You can provide the answers as the comments in the code.

-The code will appear a bug/crash because the count value which is 2,147,483,647,473 exceeded the maximum value that an integer can have in C#(2,147,483,647).



## Program's output:

```
Microsoft Visual Studio Debu! × +  

Counter 1 is 9
Counter 2 is 14
Counter 1 is 9
Counter 1 is 0
Counter 2 is 14
Counter 1 is 0

Counter 2 is 14
Counter 1 is 0

E:\COS20007\week2\Task2_2P\CounterTask\bin\Debug\net8.0\CounterTask.exe (process 16404)
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 . . .
```