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COP2362

TUTORIAL 3-4: Chapter 14 - Using Garbage Collection and Resource Management

I worked alone.

Text

Description automatically generated

Program.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace GarbageCollectionDemo

{

class Program

{

static void Main(string[] args)

{

using (Calculator calculator = new Calculator())

{

Console.WriteLine($"120 / 0 = {calculator.Divide(120, 0)}");

}

Console.WriteLine("Program finishing");

}

}

}

Calculator.cs

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace GarbageCollectionDemo

{

class Calculator : IDisposable

{

private bool disposed = false;

public Calculator()

{

Console.WriteLine("Calculator being created");

}

~Calculator()

{

Console.WriteLine("Calculator being finalized");

this.Dispose();

}

public int Divide(int first, int second)

{

return first / second;

}

public void Dispose()

{

if (!this.disposed)

{

Console.WriteLine("Calculator being disposed");

}

this.disposed = true;

GC.SuppressFinalize(this);

}

}

}