# PE2 – Squash the Bugs

## Objective

Begin to identify syntax, logical and run-time errors in C#.

* A compile-time or syntax error is code that will not compile. For example, a missing semicolon.
* A logical error is code that will compile but does the wrong thing. For example, subtracting 1 instead of adding 1.
* A run-time error is code that will generate a run-time exception. For example, trying to convert a string to an int without try/catch or TryParse()

1. Create a "Console App (.NET Framework)" called "SquashTheBugs".
2. Paste the following code into the Program.cs file:

using System;

namespace SquashTheBugs

{

// Class Program

// Author: David Schuh

// Purpose: Bug squashing exercise

// Restrictions: None

class Program

{

// Method: Main

// Purpose: Loop through the numbers 1 through 10

// Output N/(N-1) for all 10 numbers

// and list all numbers processed

// Restrictions: None

static void Main(string[] args)

{

// declare int counter

int i = 0

// loop through the numbers 1 through 10

for ( i = 1; i < 10; ++i )

{

// declare string to hold all numbers

string allNumbers = null;

// output explanation of calculation

Console.Write(i + "/" + i - 1 + " = ");

// output the calculation based on the numbers

Console.WriteLine(i / (i-1));

// concatenate each number to allNumbers

allNumbers += i + " ";

// increment the counter

i = i + 1;

}

// output all numbers which have been processed

Console.WriteLine("These numbers have been processed: " allNumbers);

}

}

}

1. Identify the compile-time, run-time and logical errors in the above code by doing the following steps:

* comment the offending lines (leave the code but put "//" in the beginning to make them comments)
* indicate what kind of error it is and why
* rewrite them correctly (perhaps at a different line of the code)
* add any additional code required to prevent any run-time errors

1. Ensure the code is fixed to work as documented in the comments.

## Submission

Add, Commit and Push this project to your GitHub repository.

Submit the URL of the project to the assignment in myCourses.