# IT 230 Coding Activity Submission

Submit your work on the coding activities for Modules One, Two, Three, Four, and Six in this document. In addition to this document, you should submit a ZIP file containing all your Visual Studio project files and source code that can be run in Visual Studio on a different computer.

For each coding activity, complete the following steps:

* Download and rename this document to meet the file naming conventions requested in the assignment instructions.
* Fill in the required information below by replacing the bracketed text with the relevant information.
* Submit this document and your ZIP file for grading and feedback. Your ZIP file should follow the same naming conventions.

Document your work in the coding activity by completing each of the following items:

1. Provide a screenshot of the output that resulted from running your program successfully in Visual Studio. See the coding assignment instructions for an example of what should be included in the screenshot. Your screenshot must include the following elements:
   1. Your last name as the first printed text on the screen
   2. Verification that the program is fully functioning and data results are accurate for the given problem

A screenshot of a computer

Description automatically generated

1. Copy and paste the source code text you wrote for this assignment from the \*.cs file into the space below. Only providing the \*.cs files or a screenshot does not meet the requirements for this part of the assignment. Code should be logically organized. It should also follow proper syntax and conventions noted in the Coding Activity Guidelines and Rubric.

using System;

namespace AddMultiplyFourInts

{

class Program

{

static void Main(string[] args)

{

// Initialize four integer variables

int num1 = 13;

int num2 = 55;

int num3 = 123;

int num4 = 325;

// Calculate the sum

int sum = num1 + num2 + num3 + num4;

// Calculate the product

long product = (long)num1 \* num2 \* num3 \* num4;

// Output the results

Console.WriteLine("Zachery's Copy");

Console.WriteLine($"The sum of {num1}, {num2}, {num3}, and {num4} = {sum}");

Console.WriteLine($"The product of {num1}, {num2}, {num3}, and {num4} = {product}");

Console.WriteLine("Press any key to continue . . .");

Console.ReadKey();

}

}

}

1. Show that you understand the task by explaining the design of your program in the space below. Include the process and steps you took to write your code. Explain how you arrived at the solution to the problem and completed the activity.

The program “**AddMultiplyFourInts”** was designed to initialize four integer variables (13, 55, 123, and 325), compute their sum and product, and output the results. The project was set up as a Console Application in Visual Studio. The integers were declared and initialized, and their sum was calculated using the **+** operator, stored in a variable named **sum**. The product was calculated using the **\*** operator and stored in a **long** variable named **product** to handle potential overflow. The results were printed using **Console.WriteLine** and the program was paused with **Console.ReadKey** to allow the user to view the output. This structured approach ensured the solution was systematically implemented and tested for correctness.

1. Reflect on your learning experience and what you learned from completing the activity.

Completing this activity enhanced my confidence in writing basic C# programs and solidified my understanding of key programming concepts. It also highlighted the importance of thorough testing and validation to ensure the program works as intended. This foundational knowledge will be invaluable as I tackle more complex programming challenges in the future.