**CSCI 301 Moustafa Elsayed**

**Computer Science 2**

**Summary of project 2**

In the three small programs, I learned how to use recursive functions to solve various problems.

By calling a function within itself, this allows the program to search for or to check with every detail of an input, in order to solve a certain problem.

In the first program “Adding the digits of an input”, we used a recursive function to take each digit and add it to the previous sum.

In the second program “Palindrome”, we used a recursive function to compare pairs of character that are opposite from each other in order to see if they are similar then move on to the next pair of the integers.

In the third program “Prime factorization”, we used a recursive function to divide an integer by its smallest prime factor then record these prime factors to print them to the user.