**CSE 212 – Programming with Data Structures**

**W03 Prove – Response Document**

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| **Name:** | Trevor Lamoglia |
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| **Teacher:** | Bro. Macbeth |

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**Question 1: From Part 1, describe what the Mystery Stack 1 code does and how the use of a stack helps in the implementation.**

The code runs the for loop for every letter that is in the text (random) and then appends it in stack. While length of stack is greater than 0 then result = result + stack.pop() (removes the most recent in stack and adds it to the empty string result)

**Question 2: From Part 1, what are the three outputs from the Mystery Stack 1 code for the following three different inputs?**

* **racecar = racecar**
* **stressed = desserts**
* **a nut for a jar of tuna = anut fo raj a rof tun a**

**Question 3: From Part 2, describe what the Mystery Stack 2 code does and how the use of a stack helps in the implementation.**

The code runs the for loop and has 4 conditions that would run each time the for loop runs. The first if statement would run after the for loop, then it would run 4 more conditions in that first if statement.

**Question 4: From Part 2, answer the following regarding what the Mystery Stack 2 code does:**

* **What will the result be if the input parameter is: 5 3 7 + \***
* **What will the result be if the input parameter is: 6 2 + 5 3 - /**
* **What input parameter would result in the display of “Invalid Case 1!” If there is less than 2 in stack**
* **What input parameter would result in the display of “Invalid Case 2!” If op2 is equal to 0**
* **What input parameter would result in the display of “Invalid Case 3!” If the if statement and following elif statements are not true**
* **What input parameter would result in the display of “Invalid Case 4!” If stack is not equal to 1**