**CSE 212 – Programming with Data Structures**

**W03 Prove – Response Document**

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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.**

Mystery Stack 1 reverses the contents of the string by adding the characters of the string to a list and then removing them from the list to a variable in the reverse order

**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 mystery Stack 2 takes the numbers in the string and the operators and applies math to it based on the string order and the

**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 + \***
  + **50**
* **What will the result be if the input parameter is: 6 2 + 5 3 - /**
  + **4**
* **What input would result in the display of “Invalid Case 1!”**
  + **A string with less than 2 characters**
* **What input would result in the display of “Invalid Case 2!”**
  + **Denominator is 0 when dividing.**
* **What input would result in the display of “Invalid Case 3!”**
  + **A non space, non parseable character**
* **What input would result in the display of “Invalid Case 4!”**
  + If there are more or less items in the stack (such as uncompleted operations)