20100992
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I confirm that this submission is my own work and is consistent with the Queen's regulations on Academic Integrity

3. In Part 1 you chose a strategy for increasing the size of the array used to hold the Stack elements. Using the four functions that you wrote in Part 2 as evidence, would you now say that your choice was a good one? Why or why not? You may wish to mention the number of times the array size needed to be increased, the total number of times values had to be copied from one array to another, or any other measurable effect of your chosen strategy

For my stack implementation, I chose the strategy to double the size of the existing array if the array was full. The trade-off, as discussed in the assignment instructions, is that there may be more space being allocated than needed. For an assignment of this scope, the values that were provided to us did not require a large amount of space to be created. Specifically, the most amount of times that the array size needed to be increased (i.e. doubled), was only twice. That being said, for some of the input values, there was still an excess number of elements being created for the amount of space that was being used, and we could've gotten away with incrementing the size of the array by a factor of 1.5, instead of 2. In addition, if the input values were much larger, then the number of times that the array size must increase would be greater, which could potentially lead to more excess space. Therefore, if I were to choose again, I would reduce the growth factor for increasing the size of the array to have a more efficient use of space, going from 2 to ~1.5.