**Question 3**

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For question 3 it asked to use an array based and a link list based stack and perform a million stack operation. We would then test them and see which stack performs faster.I found that the array based stack was much easier to perform and read. The array list initially sets its size to more than a million so that we have space to push on elements onto our stack and while we may have more space than we need at times its method of pushing onto stack is easier and requires less step by step procedure than in the link list stack. In the link list stack to push a element we create a new node each time, set the data of that node to the value we passed in and then have it point to top. Top is a node that updates and is set to the last node you created each time you use the push function. Overall i found that the link list stack was more useful as you dont need to setup an initial size of the stack and can add as much as you want but the array based stack is much faster.