

County: Los Angeles  
State: CA  
222 milliseconds to simulate the process  
Minimum number of counters: 57  
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County: Orange  
State: FL  
191 milliseconds to simulate the process  
Minimum number of counters: 51  
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County: Harris  
State: TX  
178 milliseconds to simulate the process  
Minimum number of counters: 25  
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County: Hamilton  
State: OH  
181 milliseconds to simulate the process  
Minimum number of counters: 7  
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County: New Castle  
State: DE  
183 milliseconds to simulate the process  
Minimum number of counters: 5  
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The order of each of these processes entirely depends on the method counterCalc which does the main bulk of the work for the program. This method uses a for loop with a few if statements, because of this it has a reported order of  $O(N)$  as it runs a specified number of times equal to the amount of reports. This is then increased when the program runs the processQueue method, as it runs a while loop this increases the order to  $O(n^2)$  as the worst case in the previous section adds every value to the queue.

### **Bugs/Issues**

There was an initial issue with figuring out the proper way to iterate using the dates as finding the proper index was a little difficult. Please let me know if there is a better way to implement it.