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CS 2134  
HW#3

- 1) It first prints out 6, the middle number. Then 4 is erased from the vector and the elements after is shifted. Then it prints out 2. Then it prints out 5 which was shifted because 4 was erased. Then it prints out 9 which was also shifted because 4 was erased. Then it prints out 7 which is now the middle number because 4 was erased.
- 2)  $O(n)$
- 3) a) `itrStart = a.begin()`  
      `itrEnd = a.end()`  
      `itrMid = a.begin() + (a.begin() + a.end()) / 2`  
   b) `itrStart = a.begin()`  
      `itrEnd = a.end()`  
      `itrMid = a.begin() + (a.begin() + a.end()) / 2`
- 4) a) Will print 4  
   b) Won't compile because list iterator is bidirectional so it doesn't support `+(int)` can only increment and decrement  
   c) Will print 5  
   d) Won't compile because the vector declared is a vector of int so the iterator should be a vector of int iterator however, the iterator provided is an iterator of char