Data Structures and Algorithm Complexity

1. ***Complexity*:** O(n^2) ***Operations*:** ~ n\*(n - 1)  
   ***Explanation*:** Outer loop perform n operations. In the inner loop (while) the operations are lowered with one (either by increasing the start, ot decreasing the end)
2. ***Complexity*:** O(n\* m) ***Operations*:** ~ n / 2 \* m  
   ***Explanation*:** There is two loops(one nested) the second one will be executed about n / 2 times depending if the number is odd or even.
3. ***Complexity*:** O(n \* m) ***Operations*:** ~ n \* m  
   ***Explanation*:** The loop will be executed n times and because we have a recursive call of the same method in the if statement we should multiply this by m .