Assignment Questions

Info: Question 1 and 2 are submitted as part of the same class.

Question 1:
The code works by implementing Roberts' pseudocode from his notes. The method insertionSort() keeps track of two index numbers in an array. As stated in Roberts notes: The idea behind insertion sort is to keep the elements at low indices sorted and work towards higher indices and sort element by element to the correct place.

I have submitted a screenshot with the result of input = {1, 2, 5, 3, 4, 0}

Question 2:
Worst time complexity is O(n^2). This can simply be deduced by spotting the nested for-loops in the code. The other constants can be disregarded.

Question 3:
Time complexity is O(n^2) in the worst case scenario. If an element is smaller than 0, it will be swapped with an element to the left of it. I have submitted the result of a test input.