Assignment - 6 for DSA

Analysis:

As you can see in the graph the time taken by both the algorithms is quite similar at the beginning but then it eventually goes on increasing as we increase the amount of inputs we take. The more the inputs the more difference can be seen in the two algorithm.

İn bubble sort as every element is is checked with the element next to it and this happens for n number of times where n is the number of input integers, hence the complexity drastically increases as increase in the number of input

In case of Insertion sort the graph is not increasing drastically because even tho there is an increase in the inputs the sorting algorithm is more efficient in terms of sorting large data inputs, as it compares every element with the list of elements prior to its position and inserts it at the location directly.

In. The theoretical diagram the complexity of both the algorithm is shown similar but when we runt the algorithms in realtime we find out that the practical difference of these algorithm is different.