

Question 1:

Best Case: The best case would be if the list were already sorted. a) there will be comparisons as it is but no exchanges and execution time is in $O(n^2)$ b) But if we keep a track of exchanges in each pass and terminate the program checking if no exchanges. Then the program would require only one pass and max. $(n-1)$ comparisons are required in that single pass and we can say that the complexity is of order of $O(n)$.

Question 2: