Time Complexity: O(n^2)

Due to the nested loops the time complexity is O(n^2). The outer loop runs for n-1 iterations, where n is the size of the input list arr. The inner while loop, in the worst case, may run for i iterations (where i is the current index of the outer loop), leading to a total time complexity of O(n^2).

Space Complexity: O(1)

The space complexity is O(1) because the algorithm sorts the input list in place without using additional data structures that grow with the input size.