

how you created your hybrid sorting algorithm ?

In the first I want to make Hybrid algorithm efficiency between Quicksort algorithm (the best if data is unsorted) and insertion algorithm

(The best if data sorted)

Quicksort algorithm is efficient if the size of the input is very large but, insertion sort is more efficient than quick sort in case of size of input is small, if data was sorted and the number of comparisons and swaps are less compared to quicksort, so I combine the two algorithms to sort efficiently using both approaches. I make if data is very small use insertion else make a partition and then if the left side of pivot after partition is smaller of the right, I sort the left side first otherwise I sort right side first

Hybrid algorithm is the best algorithm to sort if data is unsorted

If data was sorted Hybrid algorithm efficiency isn't the best but still more efficient than quick sort

In the first, it checks the size of the array. If it finds to be more than 20, then it divides the given array into 2 parts (like I explain above). And, if it finds to be less than 20, it calls for insertion algorithm