



## Written Homework 5

---

**(Sorting)** You are given the following list.

35 53 3 5 3 71 17 13 9 35

(1) (10 points) Sort the list, using duplex selection sort. (Show your work; label each pass.)

(2) (10 points) Sort the list, using merge sort. (Omit the splitting phase. Show your work; label each pass. No need to show all the merge steps.)



## Written Homework 5

---

(3) (10 points) Sort the list, using plain quick sort. Use the first element as pivot. (Show your work; label each pass, the pivot and each swap on each pass.)

(4) (10 points) Sort the list, using in-place quick sort. Use the last element as pivot. (Show your work; label each pass, the pivot and each swap on each pass.)