

CS302 HW3

Problem 1

Apply quicksort to $A = \{ 6, 4, 3, 9, 4, 7, 5 \}$. Use median-of-three based pivot selection. Show your work as illustrated on the corresponding quicksort example handout. That is, identify and sort the sublist of “three elements”, put a square around the element which becomes a pivot. Use arrows to indicate the subsequent left-to-right search for elements to swap during partitioning. Recall that sublists with three or fewer elements need not be partitioned as they are sorted by the initial median-of-three processing; they should therefore not be marked up.