7.1 (a) Done in "Lomoto.cpp"

(b) Done in "Hoare.cpp"

(c) Done in "Median.cpp"

(d) Haare is more efficient then Lomato's partition scheme because it does three times fewer swaps on average and it creates efficient partitions even when all values are equal.

The median of three rule does the case when the array is reversed sorted and gives a better estimate of the optimal pivot than selecting any single element when no information about the ordering of the input is known.