

# Activity Sheet 9

**Manager** name:

**Recorder** name:

**Speaker** name:

## Section 5.2

1. We will sort the letters in the word ALGORITHM by using quicksort. For simplicity, once we have 3 elements or less we simply sort them by inspection. So we will only focus on the steps that get us to that point.
  - a. What pivot would the “median-of-three” method choose? Your first step will swap the pivot to the first element.
  - b. Carry out Hoare’s partition algorithm. What does the array look like at the end of that? What is the returned index?

- c. Repeat the above two steps for any of the two parts of the partition that has more than 3 elements.