Project 1 Report

• Do your algorithms behave as expected for both unsorted and sorted input arrays?

• Which sorting algorithm was the best (in your opinion)? Which was the worst? Why

do you think that is?

• Why do we report theoretical runtimes for asymptotically large values of n?

• What happens to the runtime for smaller values of n? Why do you think this is?

• Why do we average the runtime across multiple trials? What happens if you use only

one trial?

• What happens if you time your code while performing a computationally expensive

task in the background (i.e., opening an internet browser during execution)?

• Why do we analyze theoretical runtimes for algorithms instead of implementing them

and reporting actual/experimental runtimes? Are there times when theoretical runtimes

provide more useful comparisons?