although not as high as worst case. On average, based on measured execution time, running time for worst case is double that of average case although it might differ from system to system. Also, increasing k increases computation time for worst case but slightly faster than average case. Effect of k (increasing) on best case is negligible (for small k) and time is roughly the same but shows slight effect for very large k and computation time increases but way slower than average and worst case.

- I have made these conclusions based on the time complexities of the algorithms, measured computation times of the program and the plots of the computation time with increasing k. Analysis has been used (for) to explain or prove the answer I stated.

Basic idea: Increasing k leads to more comparisons and corresponding rearrangement (ordering) because the larger it is, the more elements that are fed to insertion sort to be sorted