<Title – Suggested starting title “Sorting Algorithms”>

<Subtitle, something like “An Empirical Comparison Report”>

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# Algorithms in Isolation

[To do: paragraph describing that each algorithm will be looked at in isolation from the other algorithms.]

## Insertion Sort

[To do: discussion and charts showing Insertion sort data and asymptotic comparison]

[Chart: full data]

[Chart: zoomed]

## Merge Sort

[To do: discussion and charts showing Insertion sort data and asymptotic comparison]

[Chart: full data]

[Chart: zoomed]

## Heap Sort

[To do: discussion and charts showing Insertion sort data and asymptotic comparison]

[Chart: full data]

[Chart: zoomed]

## Quick Sort

[To do: discussion and charts showing Insertion sort data and asymptotic comparison]

[Chart: full data]

[Chart: zoomed]

## Counting Sort

[To do: discussion and charts showing Insertion sort data and asymptotic comparison]

[Chart: full data]

[Chart: zoomed]

# Small Range Comparison

[To do: paragraph describing that all algorithms will be analyzed with a small range of possible values.]

## Small Data Size

[To do: discussion and charts comparing small amounts of data (n)]

[Chart]

## Large Data Size

[To do: discussion and charts comparing larger amounts of data (n)]

[Chart]

## nlgn Sorting Algorithms

[To do: discussion and comparison of the nlgn sorting algorithms]

[Chart]

# Large Range Comparison

[To do: paragraph describing that all algorithms will be analyzed with a large range of possible values.]

## Small Data Size

[To do: discussion and charts comparing small amounts of data (n)]

[Chart]

## Large Data Size

[To do: discussion and charts comparing larger amounts of data (n)]

[Chart]

## nlgn Sorting Algorithms

[To do: discussion and comparison of the nlgn sorting algorithms]

[Chart]

# Conclusions

[To do: paragraph summarizing the conclusions made.]

# Appendix

[To do: include summary of each algorithm, with the asymptotic behavior and the empirical constant c.]

[Table of empirical data]