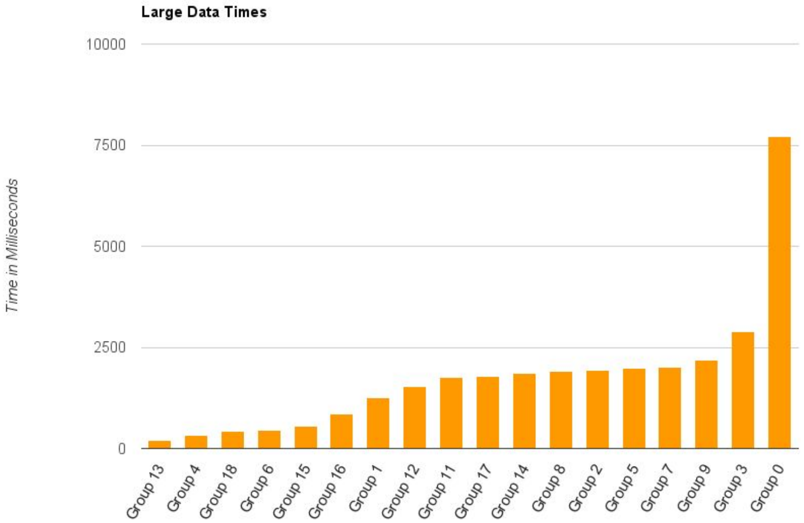
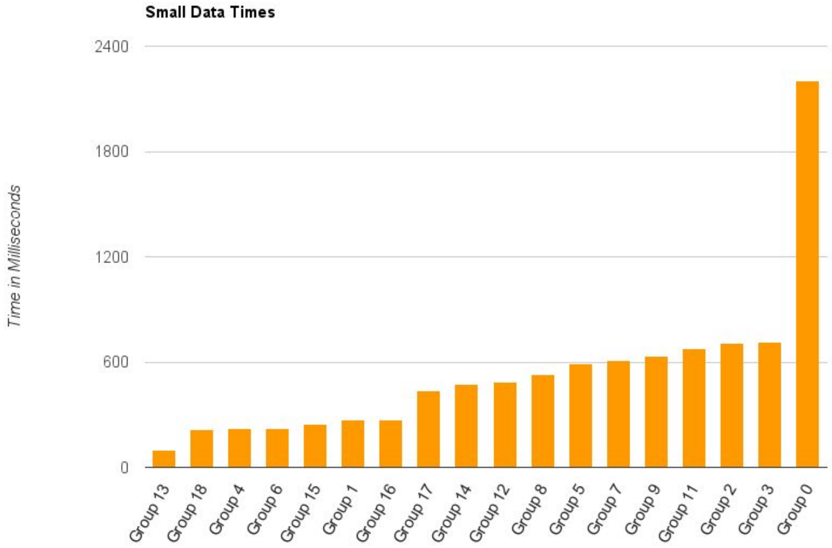
Group 5

Matthew and Mark

Results with Charts!





	Place	Time(ms)	Correctness
Small Data	12	591.0	Yes
Large Data	14	1979.0	Yes

Algorithm

- Our data was represented as strings.
- We used Timsort, the default implementation. We applied this to sorting everything in order, using an almost standard comparator.
- We also used counting sort. We applied this to sort the mod portion of the strings.
- Our counting sort was different because instead of sorting in increasing order, we sorted in decreasing.
- Our worst case is… Θ (nlog(n)). This is because Timsort has a longer running time than counting sort.

Memory

- The counting sort algorithm portion uses an extra n non-constant memory.
- The Timsort algorithm portion uses an extra n non-constant memory.

Optimization

- An optimization we implemented was that instead of doing mod for each string, we created a reference table.