**Speed Comparison**

**Lazy Eager Binary Ternary**

**Size A R A R A R A R**

100 4 50 21 12 10 29 4 30

200 10 95 41 15 19 42 11 44

300 13 198 81 18 26 73 17 68

400 15 368 131 26 38 110 26 107

500 19 625 204 29 54 154 40 155

600 25 985 282 34 73 207 60 207

700 33 1468 388 40 88 283 88 276

800 41 2101 487 46 103 372 110 367

900 55 2874 602 53 127 460 134 465

1000 66 3801 745 64 164 565 162 566

A = Add, R = Remove

**Analysis:**

Ternary heap was faster at adding elements than binary heap for smaller sets, but slower for larger sets. This is likely due to the exception case of two elements in the heap that the ternary has to account.

Ternary heap was a little slower at removing elements because it has to complete an extra comparison to find the largest of the three children.