

CSC 130 Assignment 3  
Simulation of A Simple CPU Scheduler Using  
Binary Heap  
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	Round 1	Round 2	Round 3	Round 4	Round 5	Average
AVL	737	418	454	462	507	515.6
Binary Heap	803	785	761	769	763	776.2

The AVL tree was faster than the binary heap. This is because of differences in the way some of the functions are carried out between the two structures.

Type	AVL	Binary Heap
insert Average	$\log n$	0 1
insert worst	$\log n$	$\log n$
delete worst	$\log n$	$\log n$

The main advantage of a binary heap is the fast insertion time. Since a binary heap is using an array it takes more time to pass values around the array compared to a AVL tree which is moving pointers around. This passing by reference instead of by value is the reason the AVL tree is faster.