Report- James Campbell – 2398110C

date.c:

Compiles, and runs correctly for the given files.

Limitations: It checks that the date follows the xx/xx/xxxx format, but does not check that the dates given are reasonable. For instance, it would reject 1/1/2020 as the format does not match, but it wouldn't reject 52/21/9999. If it takes a date like 42/01/2020, the date comparison function would consider this date to be before 01/02/2020, as the second date has a later month.

Tldlist.c:

Compiles, and runs correctly for the given files.

Limitations:

Adding: If the hostname doesn't have any dots in it, it won't add anything as it takes this as an invalid input. It also takes 0 characters after the last dot in the hostname string as an invalid input.

Iterator: The iterator works by taking the current node and using a set or rules to select the next one. This means that if the tree is changed in the middle of iteration, some nodes may be missed, and some may be selected more than once. This is especially problematic with a AVL tree, as the rebalancing can make a huge difference to the layout of the tree, and cause huge problems with iteration. In the case of the given tldmonitor.c, this is not a problem as the tree is not changed in the middle of iteration.

Sanitisation/memory leaks:

Running each of the sanitisers (address, memory, and undefined) gives no results.

Valgrind reports no memory leaks, and no errors that relate to the code I have written, but it does show some errors from other sources.