

ASSIGNMENT 6 WRITEUP

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1 Goal

My assignment 6 takeaways.

2 TAKEAWAYS

BITWISE OPERATORS

- First time really understanding bitwise operators and their uses:
- $\text{num} \ll \text{index}$ or $\text{num} \gg \text{index}$ 1 can be used to check if a specific bit of a number, at an index, is set.
- bitwise or can be used to set bits
- bitwise and, combined with not, can be used to clear bits

BINARY TREES

- A tree type data structure can be made in C, by creating a node ADT, and linking the nodes together somehow
- in the case of our trie tree, nodes are linked by a list and a code
- in order to free a tree, all children nodes must be freed first, from lowest children, to highest
- this can be done with recursion
- if you free highest first, you will lose access to lower nodes, which isn't good

COMPILING MULTIPLE EXECUTABLES

- makefiles can compile multiple executables
- using make all: binary1, binary2, etc