Documentation:

PA2

Calc:

I have created Calc using a main struct that had been malloced some memory. I have used this memory to save some crucial parts of the programs, these include the the current string. In my main function is where most of the magic happens, I have inside the main function a call to other functions that allows the other functions to pick up specific roles. For example when a decimal needs to converted to an octal there exists a function that allows that to happen. Then when it needs to converted back to into a decimal or another type there is another function for that as well. In fact I need up using one of my function in the format program as well.

Efficiency:

The efficiency in the program relates back to the function calls, the main function is calling the other functions and then the string is being acted upon, where are loops within the function that allow the conversion and manipulation to the to the types. I think this was a good way of dealing with this situation because I didn’t want to have endless amounts of loops going on in my program. The only time a loop is executed is when a function is called and then the loop stops, and there are no loops in the main function.

Memory usages:

I have dynamically allocated memory for the struct that is holding the strings for the two different tokens. I also allocated some memory for smaller roles such as carrying a changeable string that can get passed around.

Things you should know:

When there is a wrong input, my program will automatically tell you by “ERROR” followed by the reason the error was caused. most of the errors in the programs are set off invalid inputs, whether they are wrong operation types of wrong types of token all together. The program will notify you when this happens.