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System programming -Assignment 1- Tokinizer

Tokenizer is a program that runs by taking an input string from the User and
processes the input into different catagories of "Tokens". Tokens can be
denoted by Decimal integer, Float, Word, Hexadecimal, Octal, C operators, and
bad tokens. The Tokenizer program is smart enough to only take in 1 String per
run time command. If no string is inputted, Tokenizer will detect that nothing
was inputted. Spaces, tabs, new line, return in between the string itself is also
 a determining factor of different tokens. Bad tokens are denoted by any symbol
that is not covered by any of the above following definitions in tokenizer.

The program utilizes many sub functions such as gethex, getFloat, getOctal,
getWord, getOp as easy helper methods that make TKGetnexttoken easier to manipulate
instead of a long list of if conditionals. Each function is situation specific in
accordance with its own definition. This program utlizes a first come first serve basis
in that, given a word "hello0.123" it will detect the word "hello0" and realize "." as a
structred member in the C operators library, followed by the decimal "123". One of its key
features as a program is specificity, and being able to detect and break down token by token.
** Note**
When user inputs the string, it is highly encouraged to test it with '<user string input> '. The '' is
important because bash by default uses ! and $ for its orginal commands.
Example: ./tokenizer 'hello world'