CODING STANDARDS OF C LANGUAGE

NEED OF CODING STANDARDS

* Coding standards increase the efficiency the software and reduces the development time.
* Coding standards help in detecting errors in the early phases, so it helps to reduce the extra cost incurred by software project.
* If coding standards are maintained properly, then the software code increases readability and understandability thus it reduces the complexity of the code.

SOME OF THE CODING STANDARDS

1. NAMING CONVENTIONS

* Meaningful and understandable variable names help anyone to understand the reason of using it.
* Generally, for functions and local variable names we start with lower case letters whereas for global variables start with capital letters.
* Constant names should be formed using capital letters only.
* It is better to avoid the use of digits in variable names.

1. INDENTATION AND STRUCTURING

* Proper indentation makes code more readable and thus easier to modify and debug.
* Whenever a block is nested inside another block, the inner block must be indented so that we can clearly understand the flow.

Overall structure of the program must be organized as follows

1. Program header comment statements
2. #include statements
3. #define statements
4. Type definitions
5. Functions organized in a logical manner
6. Main function
7. COMMENTS

* Comments are among the most important parts of any program
* Comments make it possible to understand code quickly and thus make it more likely that modifications to code will be correct and will increase programmer efficiency and productivity.

1. SIZE

* Lengthy functions are difficult to understand hence the functions should be small and should carry a single task.
* Lengthy functions should be broken into small functions.

1. FORBIDDEN PRACTICES

* Limited use of globals

Do not use global variables unless the variable is used in every function in the file.

* Do not use GOTO statement

GOTO statement makes the program unstructured; it reduces the understandability hence try to avoid using of GOTO statements.