

Coding Standards of C Language

Rules:-

1. All programs shall be written to comply with the C99 version of the ISO C Programming Language Standard.
2. Preprocessor directive `#define` shall not be used to alter or rename any keyword or other aspect of the programming language.
3. The width of all lines in a program shall be limited to a maximum of 80 characters.
4. Do not rely on C's operator precedence rules, as they may not be obvious to those who maintain the code. To aid clarity, use parentheses to ensure proper execution order within a sequence of operations.

5. Keywords to Avoid

- The `auto` keyword shall not be used.
- The `register` keyword shall not be used.
- It is a preferred practice to avoid all use of the `goto` keyword. If `goto` is used it shall only jump to a label declared later in the same or an enclosing block.

- It is a preferred practice to avoid all use of the continue keyword.

6. Keywords to Frequent

- The static keyword shall be used to declare all functions and variables that do not need to be visible outside of the module in which they are declared.
- The const keyword shall be used whenever appropriate.
- The volatile keyword shall be used whenever appropriate.

7. Comments

- Code shall never be commented out, even temporarily.
- All comments shall be written in clear and complete sentences, with proper spelling and grammar and appropriate punctuation.
- All assumptions shall be spelled out in comments.

8. Alignment

- The names of variables within a series of declarations shall have their first characters aligned.
- The names of struct and union members shall have their first characters aligned.
- No line of code shall contain more than one statement.

- Each indentation level should align at a multiple of 4 characters from the start of the line.

9. All module names shall consist entirely of lowercase letters, numbers, and underscores. No spaces shall appear within the module's header and source file names.

10. All switch statements shall contain a default block.