CODING

Coding Standards / Guideline

1. Limited use of global variable
2. Headers for different modules

Name of the module
Date of creation
Author
Modification history
Synopsis about the module
Different Functions called in module
I/O, O/P Parameters.
Global variables accessed by the module.

3. Naming convention for Local variables, global variables, constants & functions.

Local data ✓
Global Data ✓
CONSDATA ✓

4. Proper indentation

5. Error handling or exception handling convention for function. eg. Error message, Return of function incase of errors

6. Avoid too difficult coding style

7. Use of identifiers for multiple purpose

8. Use comments indicate purpose of code segment.

9. Avoid lengthy functions.

10. Avoid GOTO statements.

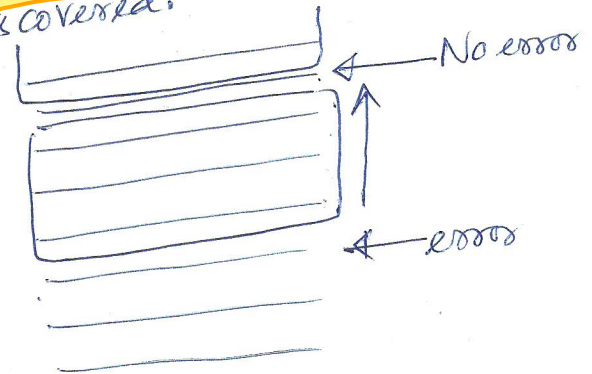11. Avoid repetition of same piece of code

12. Namming of file & folder

13. Use INCREMENTAL approach rather than BIG-BANG approach for integrating function/class.

DEBUGGING

1. Brute force method (cout)

Checking values of variables ———— printing intermediate values of variables, use breakpoint, use checkpoint

2. Backtracking / Backword analysis

Starting from statement with error/error region, statements are traced backwords till error is discovered.

Examination of previous version of a code.

← No error

← error

3. Cause elimination

Listing down causes that may have contributed the error.
Tests are conducted to find exact cause.

4. Program slicing

Slice a program for a particular variable
Comment out rest of the parts.

a, b, c, d ----

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simplified version