Minimal – do not add anything from your side means extra requirement.

Satisfied= meet all requirements.

Which one to prefer between safety and reliability?

Ans choose safety because its more imp.

**State based system:**

System based on different states. Ex, Tax calculating system. Tax in Canada 13%, Nova scotia16%, Alberta 5%

If it is a global system it will work perfectly everywhere.

Stack-LIFO -------input/push and output/pop

Queue-FIFO-------input/enqueue and output/dequeue

*Program Correctness and Verification*

**Correct**---- if all requirements are satisfied then it is correct all input are present and gives results defined in all output. OR Has all input with correct output of each

**Partially Correct----** if not all inputs are present/ Doesn’t have all input but all input it has are giving correct output

**Terminate Normally**----- if incorrect output/it has at least one input is giving wrong output

*Failures, Errors, and Faults*

**Failure**: when the Final result is different than the requirement, not consider what happen in between

**Fault:** Writing wrong statement, fault in some cases causes an error while in some might not.

**Error:** two types of error, error which causes a failure and error that doesn’t cause a failure

Failure

Fault -----sensitized-----🡪 Error

No failure

Fault------not senitized------🡪No Errror

No Faults -----🡪 No Failure

->Fault Is about the code and error is about the input.

🡪 Fault is evasive, that is hard to find