Errors

1) In is null when ENTER is executed
2) user forgets ENTER between entries
3) user forgets ENTER before operator executed (binary)
4) user forgets ENTER before operator executed (unary)

result

1) string to numeric cast fails
2) error is input register (double occupied register)
3) error is result is ≥ 0 ? (unknown y contents)
4) error ϵ x is zero (0) unary operation alway on zero (0) [possible division by 0]

Solutions

set an entry flag when ENTER PUSHED (1,3,4)
check In register is not null (1)
check x is not zero for unary inverse (4)
check x is not zero for division op (4)

error 2 is avoided only by user care and attention
error 3 is avoided if register contents are displayed (may also help user
attention to error 2 also)
most effective is if enter flag is checked before operations executed
in lieu of a separate register display is the history log