28 Jan '25

→ If-else examples

→ check cases where your logic fails, edge/boundary cases

→ not (x and y)

= not x or not y

→ To determine minimum coin denominations for 'change' in currency — "Greedy" approach

Greedy approach uses largest valued coins first.

This solution works for US currency but not for other coin systems.
(See notes document on examples)

HW: Come up 5 examples of coin systems and minimum number of coins where greedy approach fails

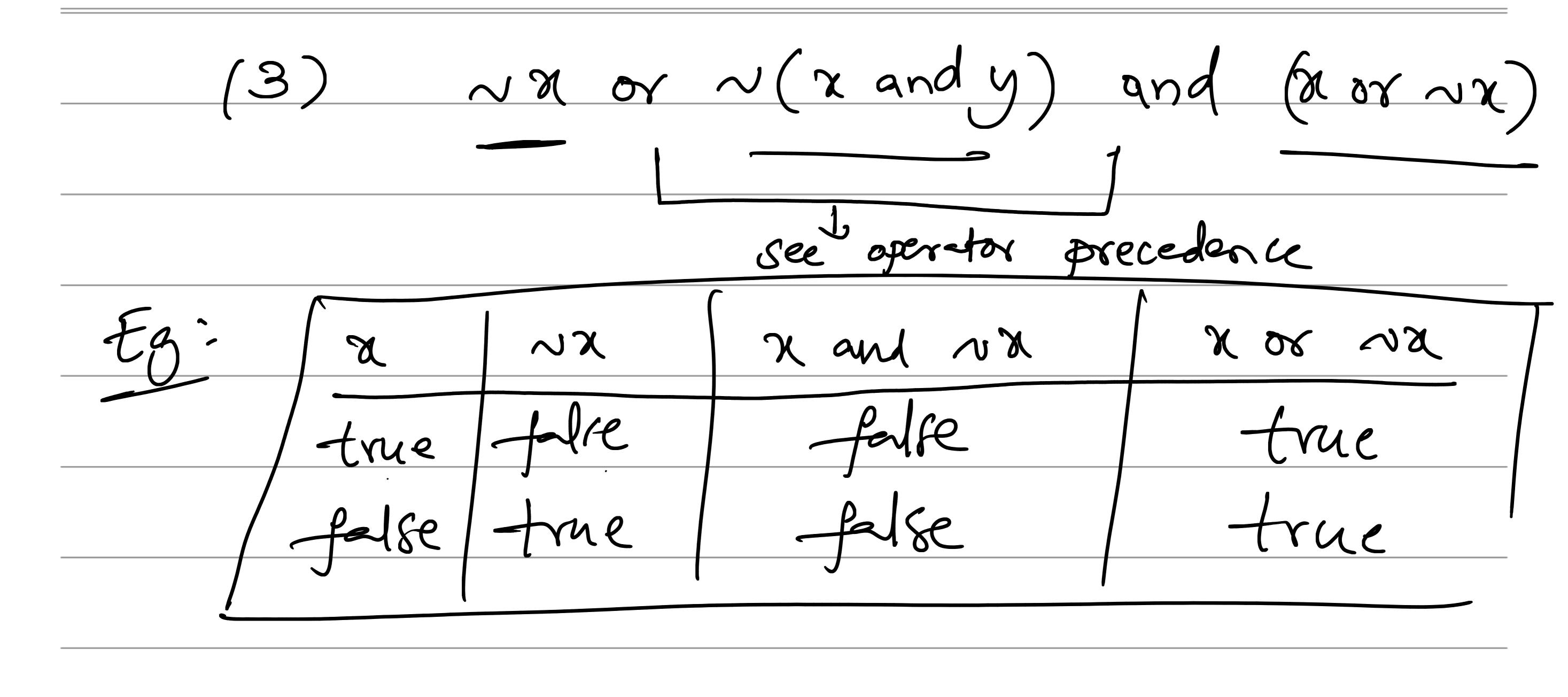Eg: Coin system — 12, 5, 1

Change for 15 cents — Greedy solution get 4 coins while best solution is 3 coins.

Truth tables: It's a table that explains what happens to boolean values when using some operators

x	y	x and y	x or y	not x	not y
true	true	true	true	false	false
true	false	false	true	false	true
false	true	false	true	true	false
false	false	false	false	true	true

HW: Write truth table for the following

(1) (x and ~y) or (~x or y)

~ = not

(2) ~(x and y) or ~(x or y)

(3) $\sim x$ or $\sim(x$ and $y)$ and $(x$ or $\sim x)$

see operator precedence

Eg:

x	$\sim x$	x and $\sim x$	x or $\sim x$
true	false	false	true
false	true	false	true

HW: Solve AI generated HW problems on truth tables.

→ Started learning loops, types, examples

HW: See multiplication tables & loop examples code from earlier.