Pseudocode

- Assignment: $a \leftarrow b$
- Arithmetic: $+ - \cdot /$
- Conditionals: if (maybe case as well)
- For: for $i \leftarrow a$ to b
- While: while
- Array access: $F_1, F_{i,j}$

Example: Change Problem

US Change(M)
INPUT: an amount of money M, given in cents
OUTPUT: the smallest amount of

- quarters q
- dimes d
- nickels n
- pennies p

such that $M = .25q + .1d + .05n + .01p$ and $q + d + n + p$ is minimized.

1. while $M > 0$
2. $c \leftarrow$ largest coin such that val(c) $\leq M$
3. $M \leftarrow M -$val(c)
4. GiveCoin(c)

Towers of Hanoi

Hanoi(n, fromPeg, toPeg)

1. if $n = 1$
2. output "Move disk from $fromPeg to $toPeg"
3. return
4. else
5. unusedPeg = 6 - toPeg - FromPeg
6. Hanoi($n - 1$, fromPeg, unusedPeg)
7. Move(fromPeg, toPeg)
8. Hanoi($n - 1$, unusedPeg, toPeg)