

Wed 10 Feb 2019

Up Down
Simulation
Pattern

10^t

Work on
paper &
find PATTERN

$\times N_f = 0$ $N_B = 2$

$\times N_{fw} = 1$

$\times N_{fw} = 2$

\times

$\times N_B = 0$ $N_{fw} = 4$

$\times N_B = 1$

$\times N_{fw} = 0$ $N_B = 2$

$\times N_{fw} = 1$

$\times N_{fw} = 2$

$\times N_{fw} = 3$

$N_{fw} = 4$

$N_{fw} = 2$

while skip > 0

break on paper &
stretch logic

```
Nikki
if Nf > 0:
    Nf --
    Nps++
else:
    Nps --
    Nps++
    Nps++
```

PSEUDO-CODE

HOW DO I SOLVE A PROBLEM COMPUTATIONALLY?

That is, how can I come up with a program that solves a given problem?

1) First work on paper as many cases as you need in order to find the pattern of the problem. In some sense, this is like simulating on paper the problem.

2) Then sketch the logic of the procedure (the program) that solves the problem. Do it by writing some pseudo-code.