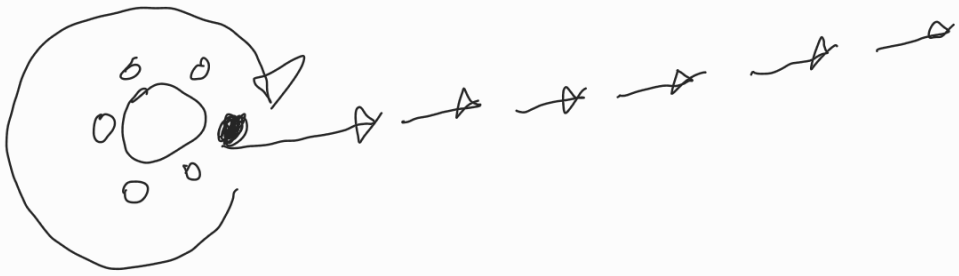
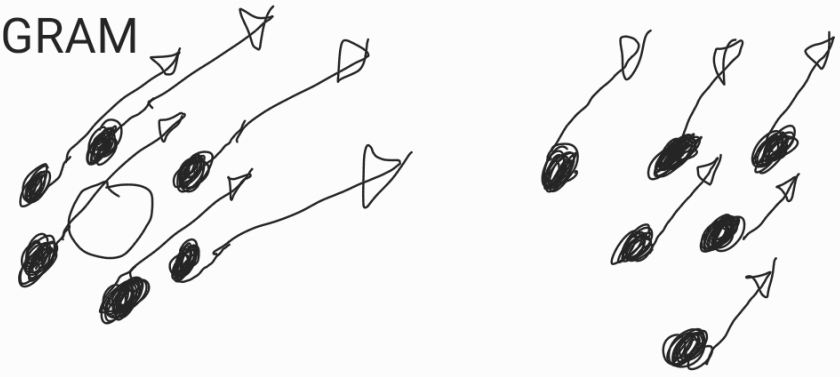
SINGLE-THREADED PROGRAM

1 barrel
6 in chamber
1 hammers
1 trigger

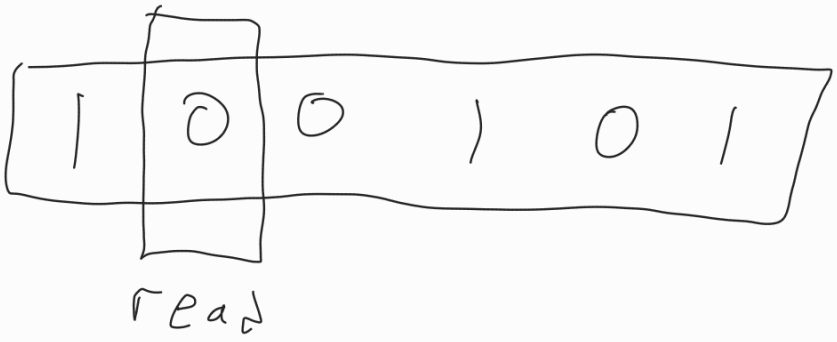


MULTI-THREADED PROGRAM

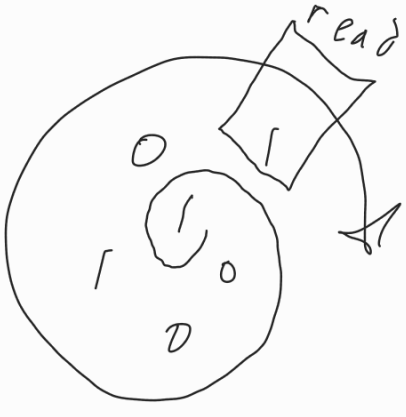
6 barrel
6 chamber
6 hammers
1 trigger



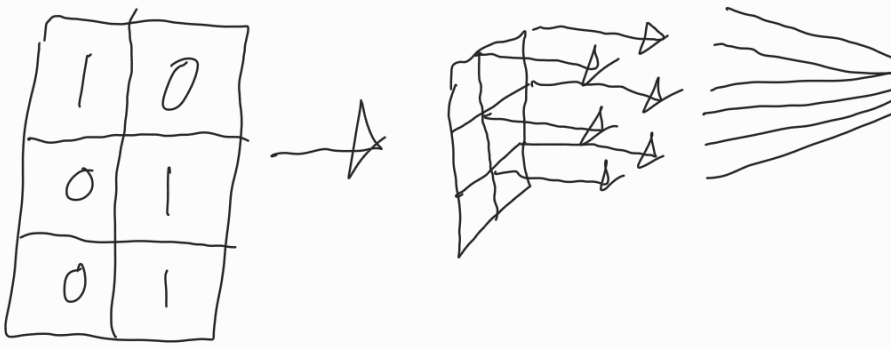
Reload to use again



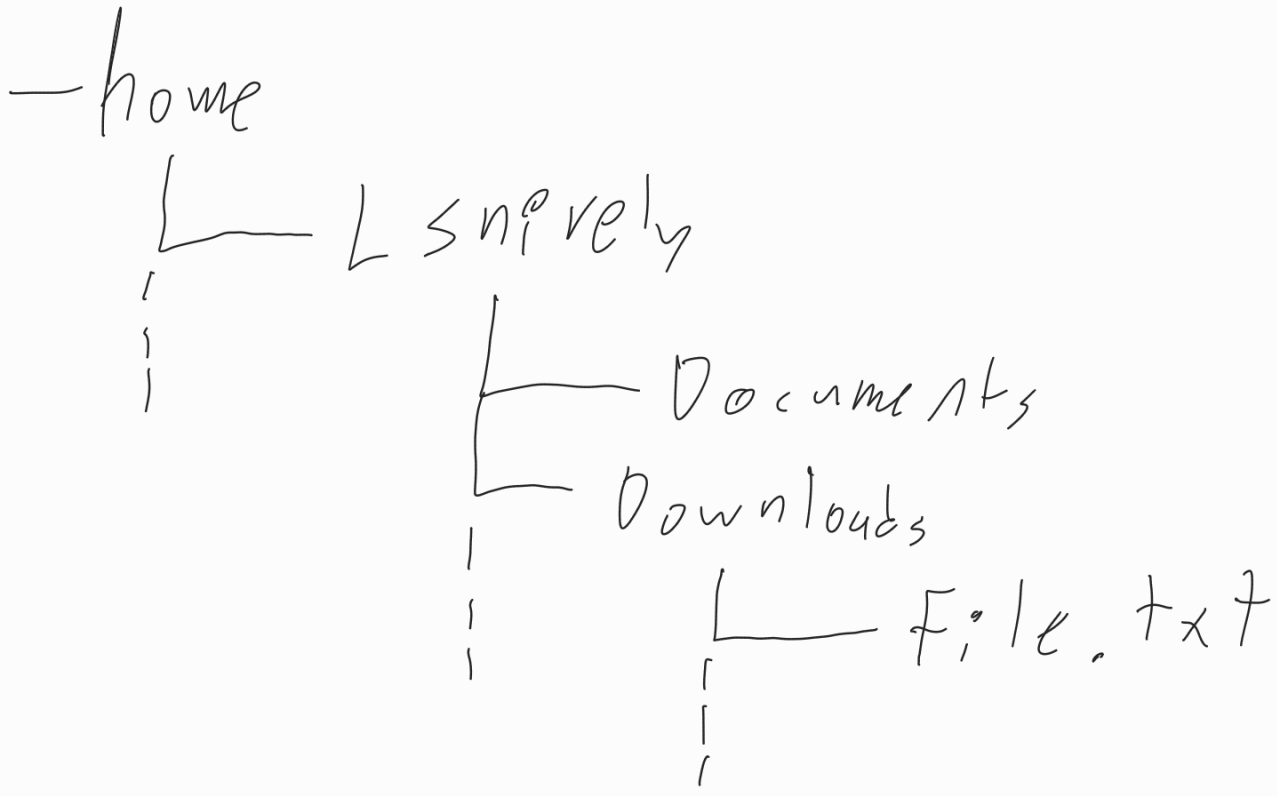
tape



disc



image



File system represented as directory tree

Rules
S -> A
A -> AA | (A) | ε

Derive
((()())(()))

S -> A
S -> (A)
(A) -> (AA)
(AA) -> ((A)A)
((A)A) -> ((A)(A))
((A)(A)) -> ((AA)(A))
((AA)(A)) -> (((A)A)(A))
(((A)A)(A)) -> (((A)(A))(A))
(((A)(A))(A)) -> (((ε)(A))(A))
(((ε)(A))(A)) -> (((ε)(ε))(A))
(((ε)(ε))(A)) -> (((ε)(ε))(ε))
(((ε)(ε))(ε)) - > ((()())())

Represent alphabet and construct a language that can be accepted by dfa, nfa, pda, cfg, tm.

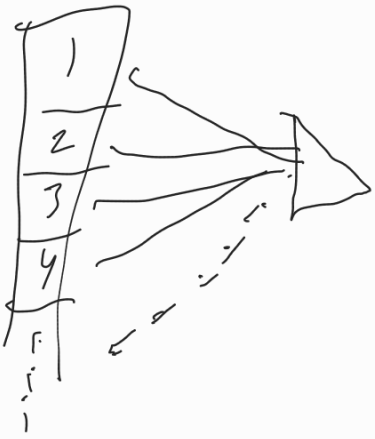
x^2

domain	range
1	1
2	4
3	9
⋮	⋮

$$f(x) = x^2$$

data $\Rightarrow$ f $\rightarrow$ true

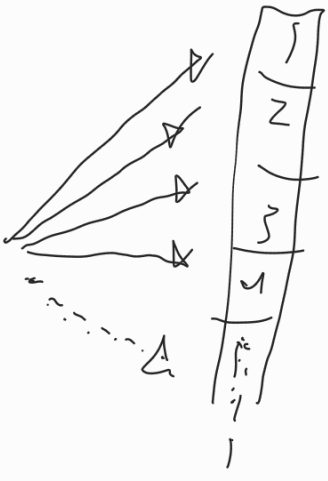
domain range



$$f(x) = x^2$$

range

$$x^2 \not\rightarrow \sqrt{x}$$



inverse function

Template data types: number, letter, color,