Introduction to Algorithms

Complete Course on Algorithms

Subbarao Lingamgunta • Lesson 1 • Feb 8, 2021

Algo

Syllabus

1. Analyzing algo
2. DAC

3. Greedy Technic

4. Dynamic programming

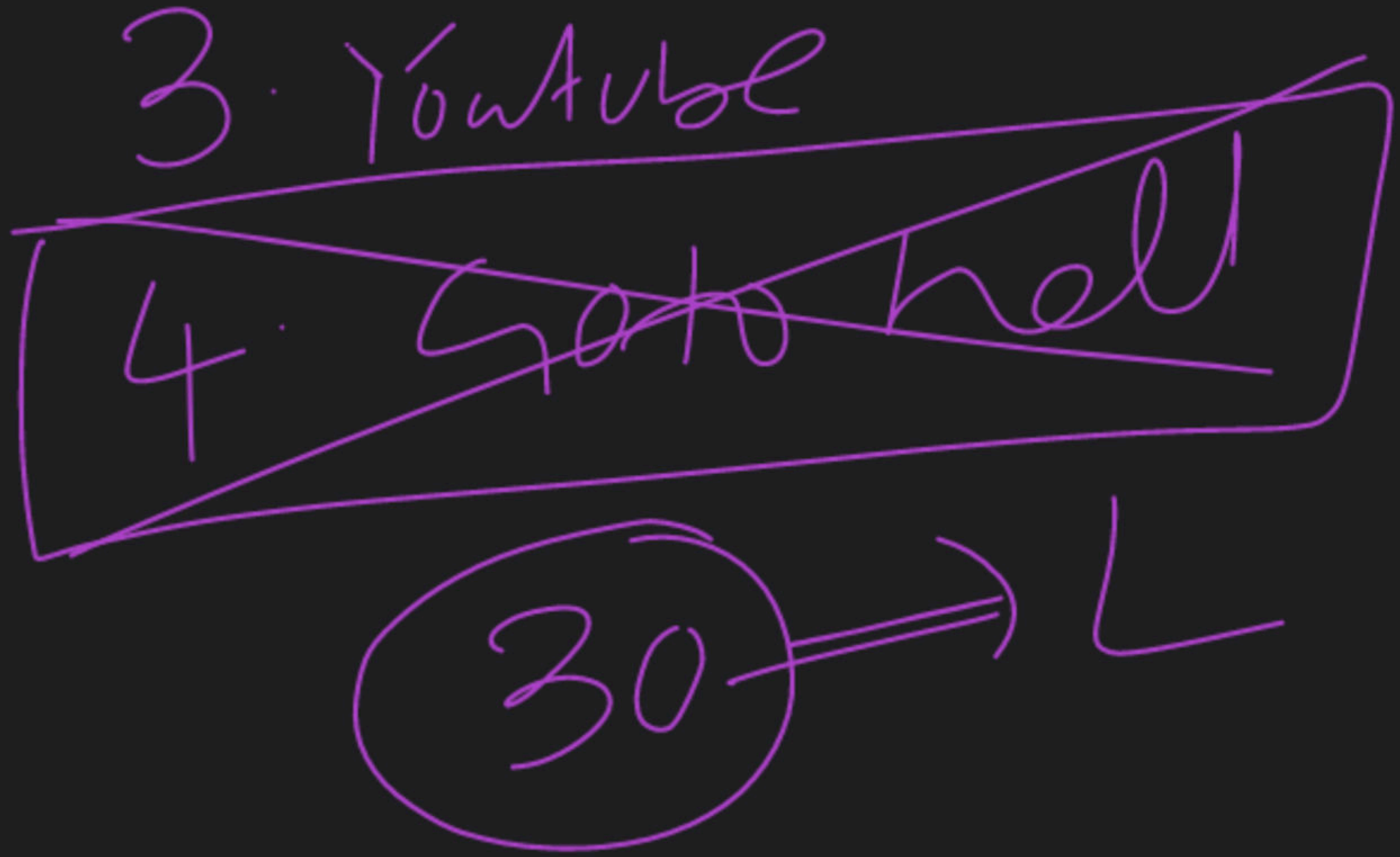
5. Graph & Tree Traversal

6. Hashing

Reference

1. Notes

2. Introduction to algo by Cormen

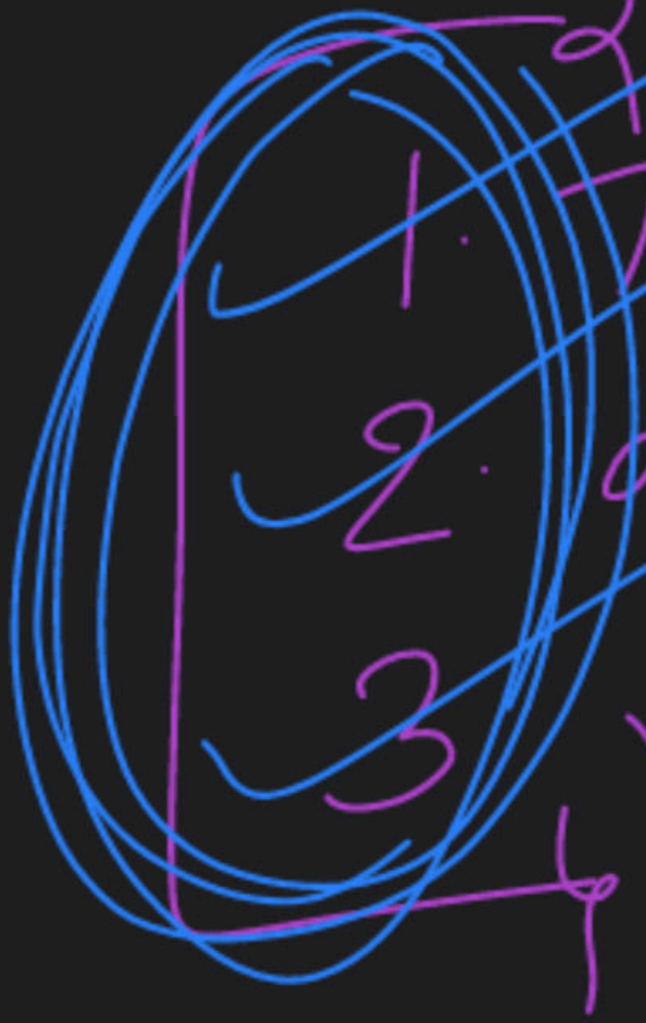

3. YouTube
4. Go to hell
30 → L

Algo

Definition

It is a combination of sequence of finite steps to solve a problem.

Q ATM()



{

1. Take 2- nos (a,b)
2. add a && b and store in c
3. return (c)

}

Properties of Algo

(1) It should terminate with in finite time

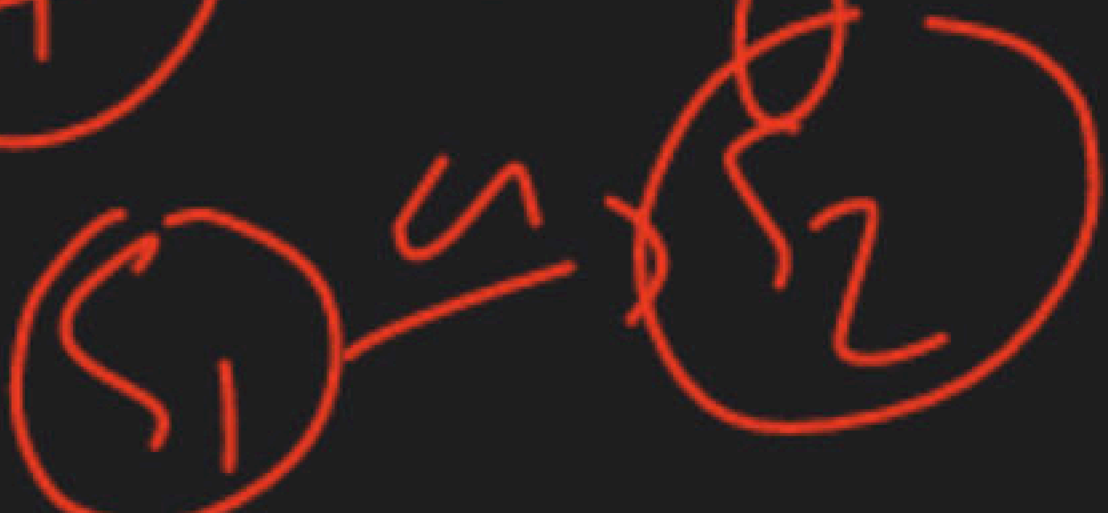
while(1)

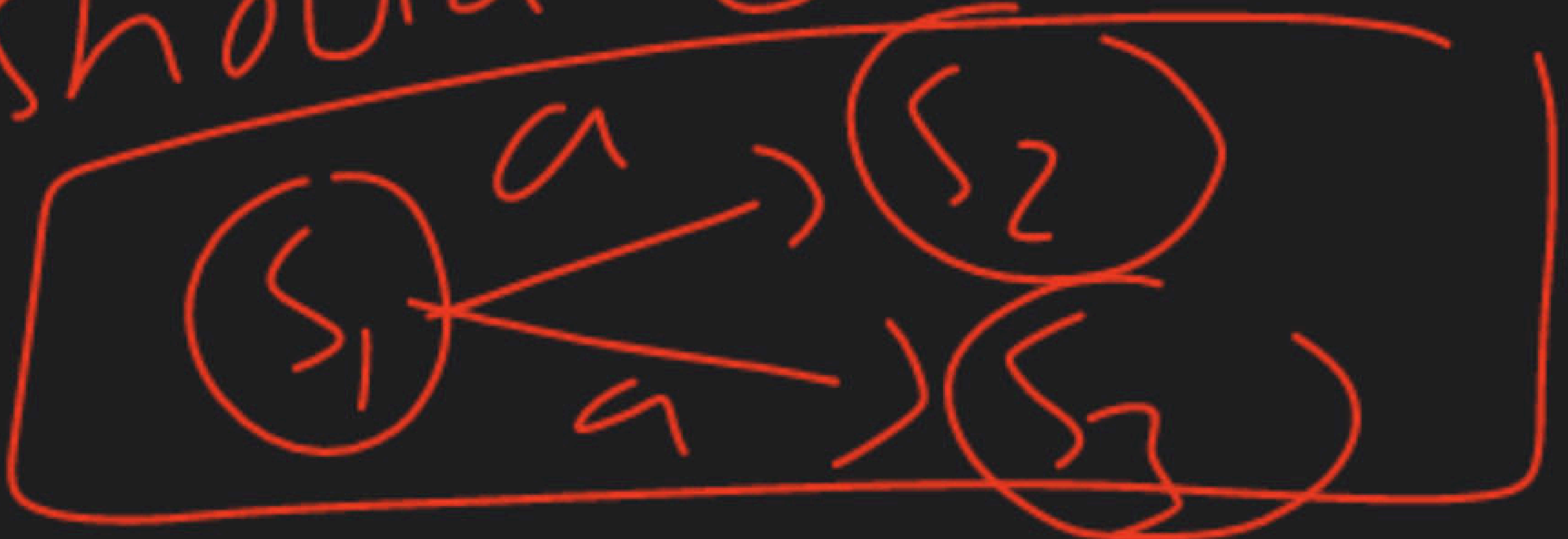
pf(hi)

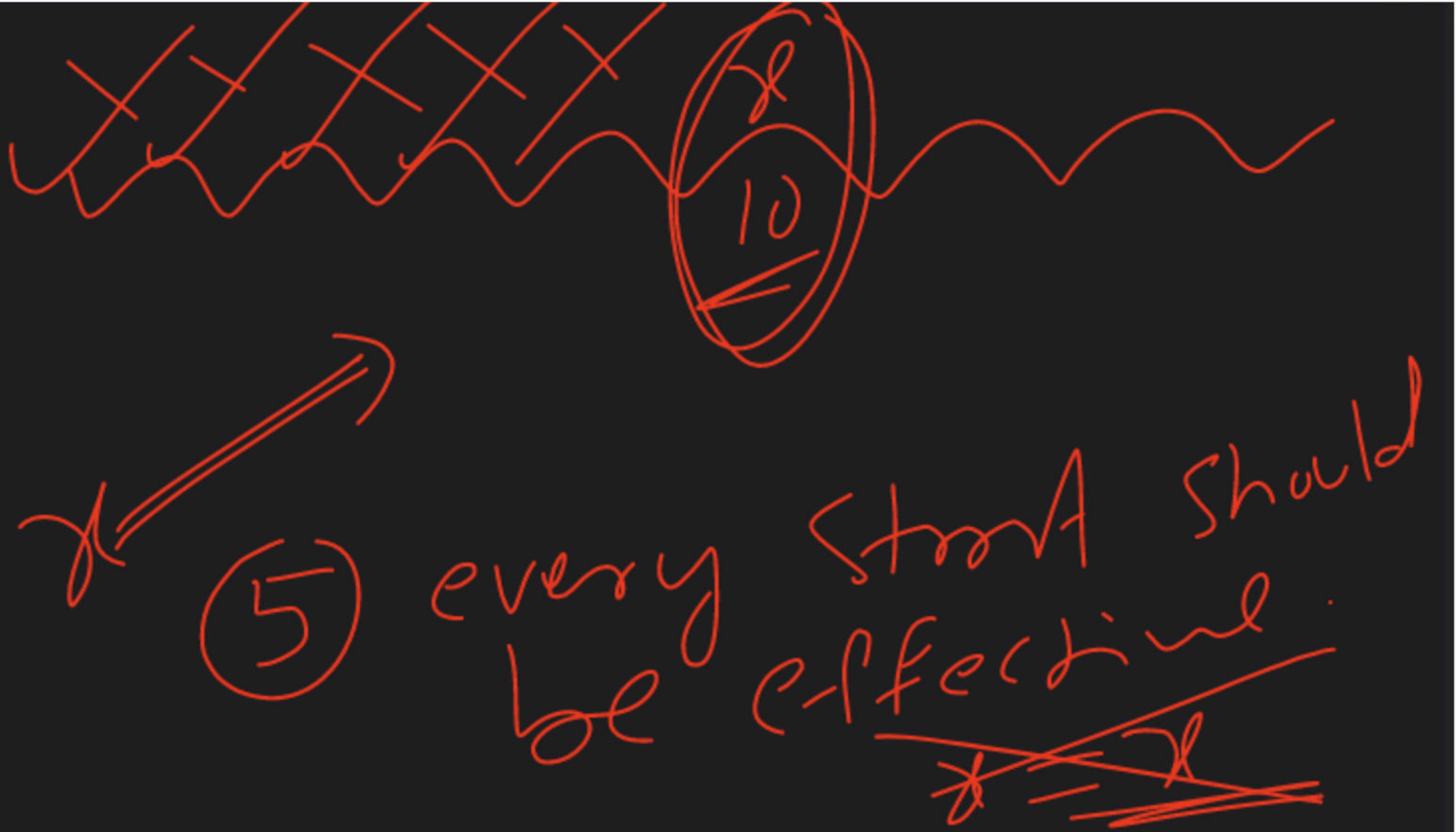
② It should produce atleast 1 - O/P.

③ ~~It may take I/P and~~

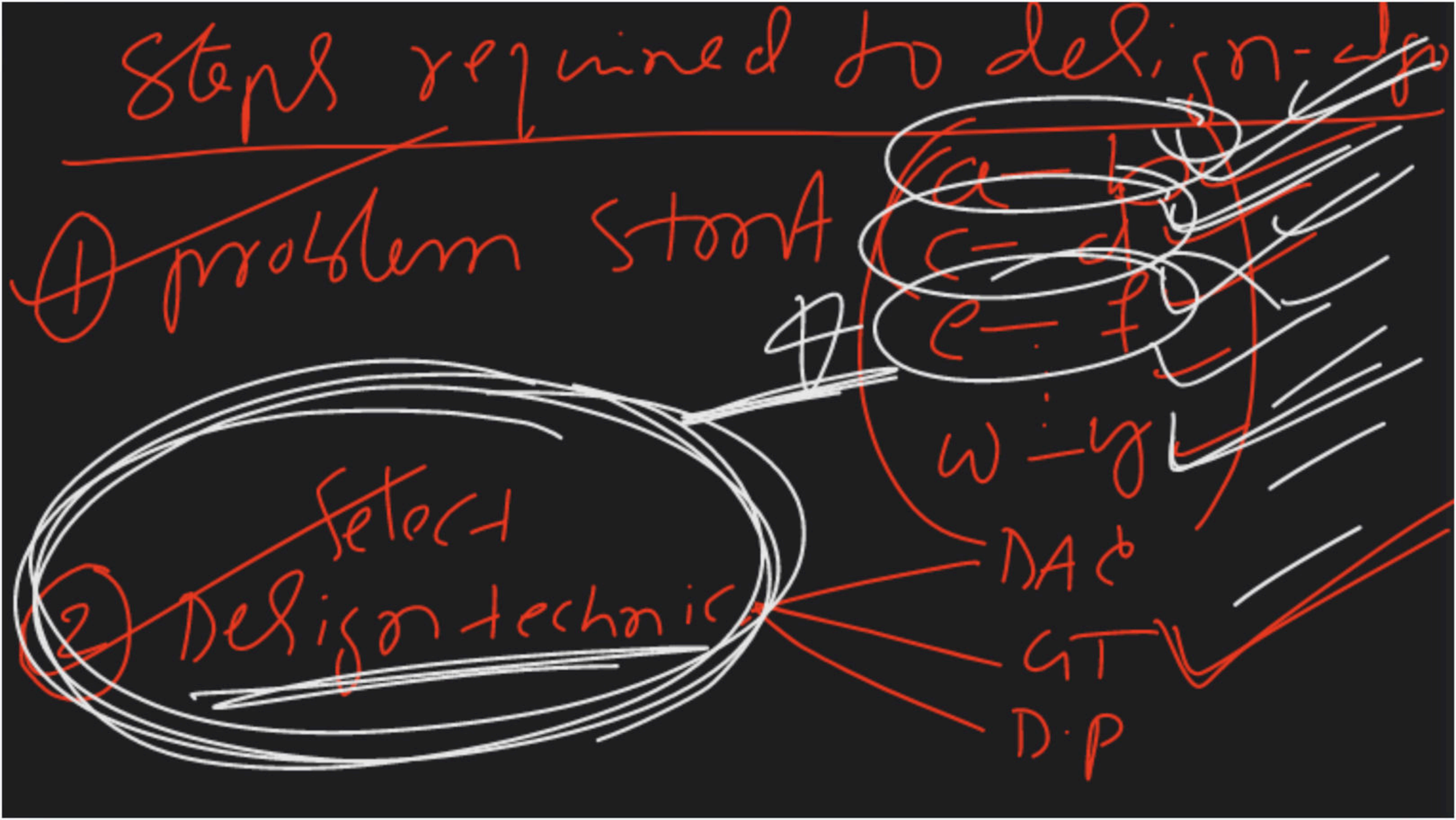
④ Also should be determinism






38
10
5
every
should
be effective

⑥ It is independent of programming language.


Steps required to design-
① problem statement
② select design technic
DAC
GT
D·P

(3) Flow chart

(4) Verification

a - b
c - d
e - f
⋮
w - yz

(5) coding

(6) Analysis


AAD
DAA
ADA


Analyzing
algo