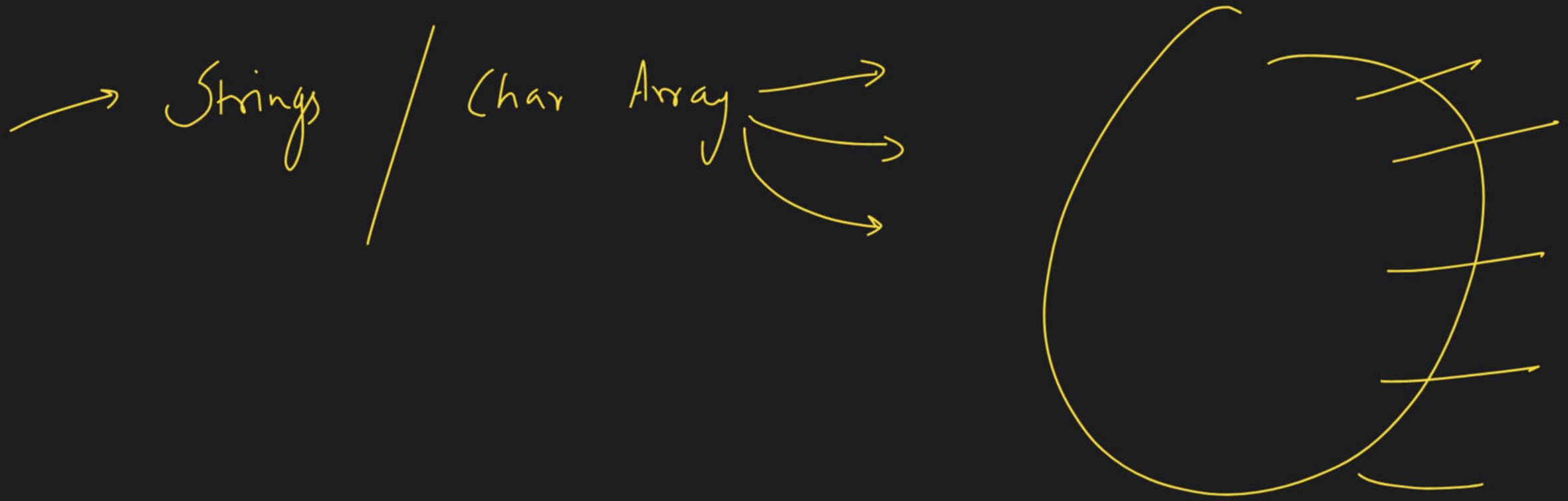
Char Arrays & Strings Class 3

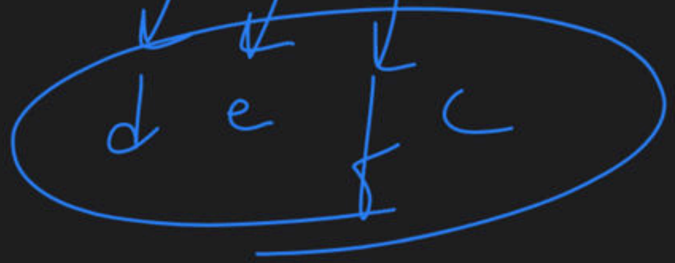
Special class

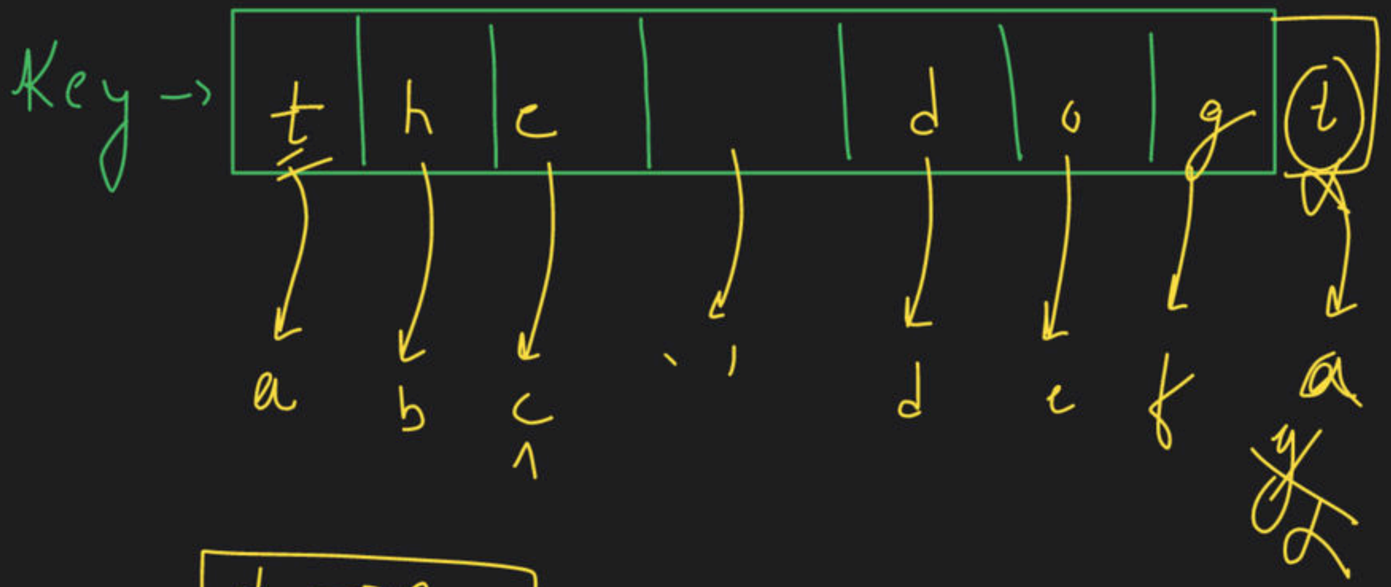
Love Babbar • Sept 27, 2023

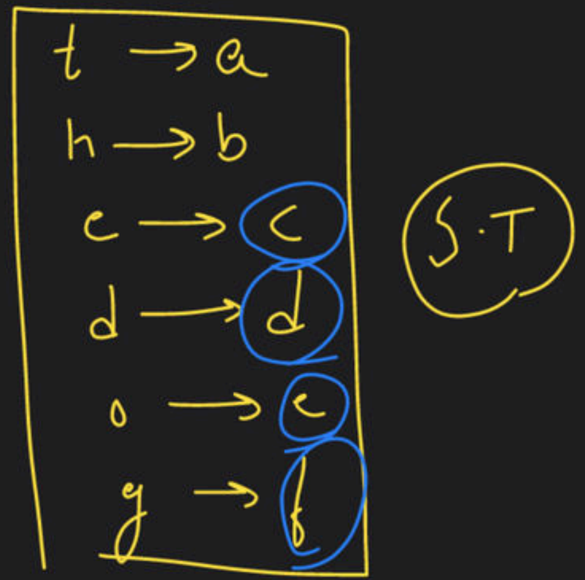

Strings
Char Array

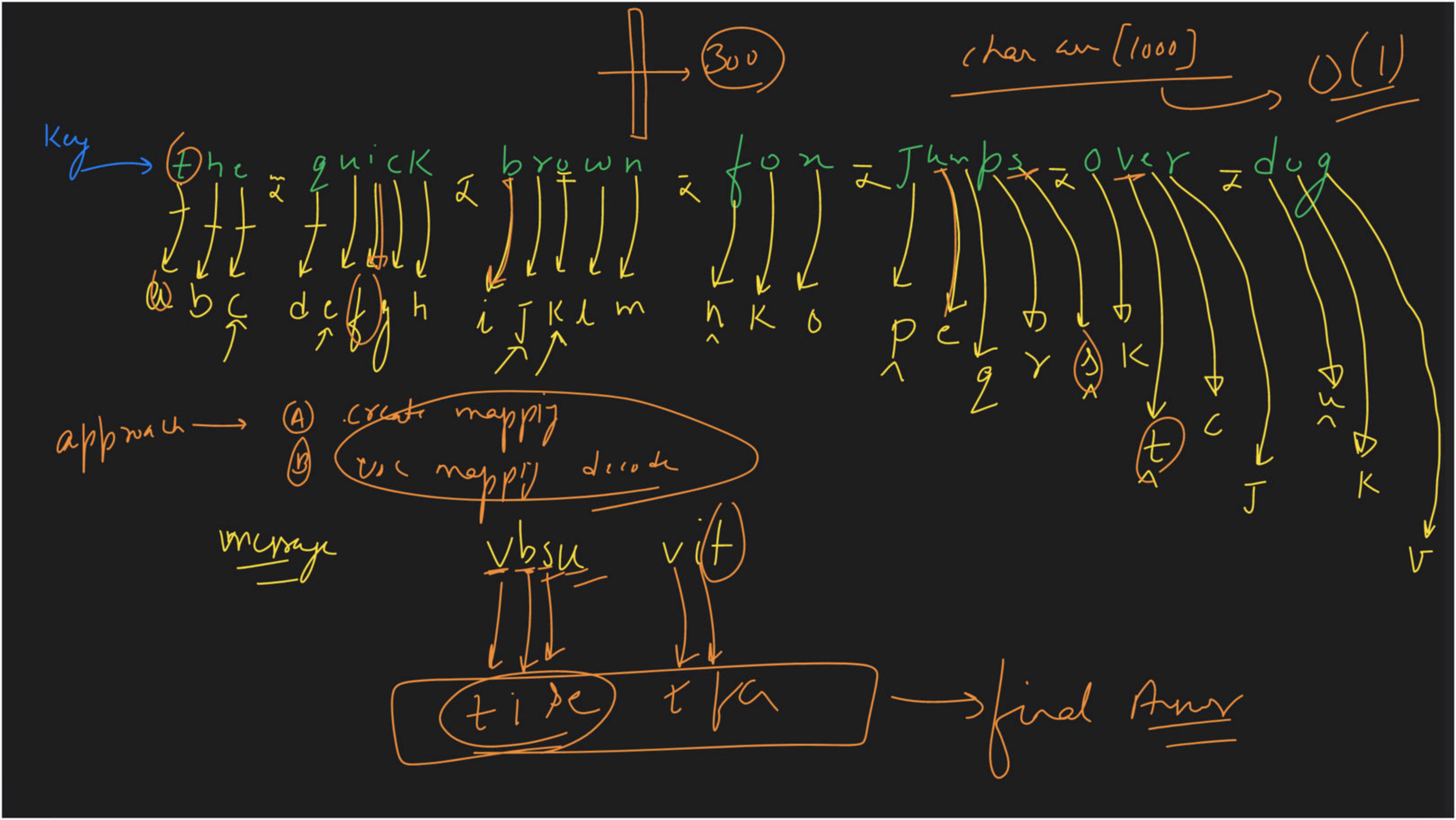
→ Questions solve :-

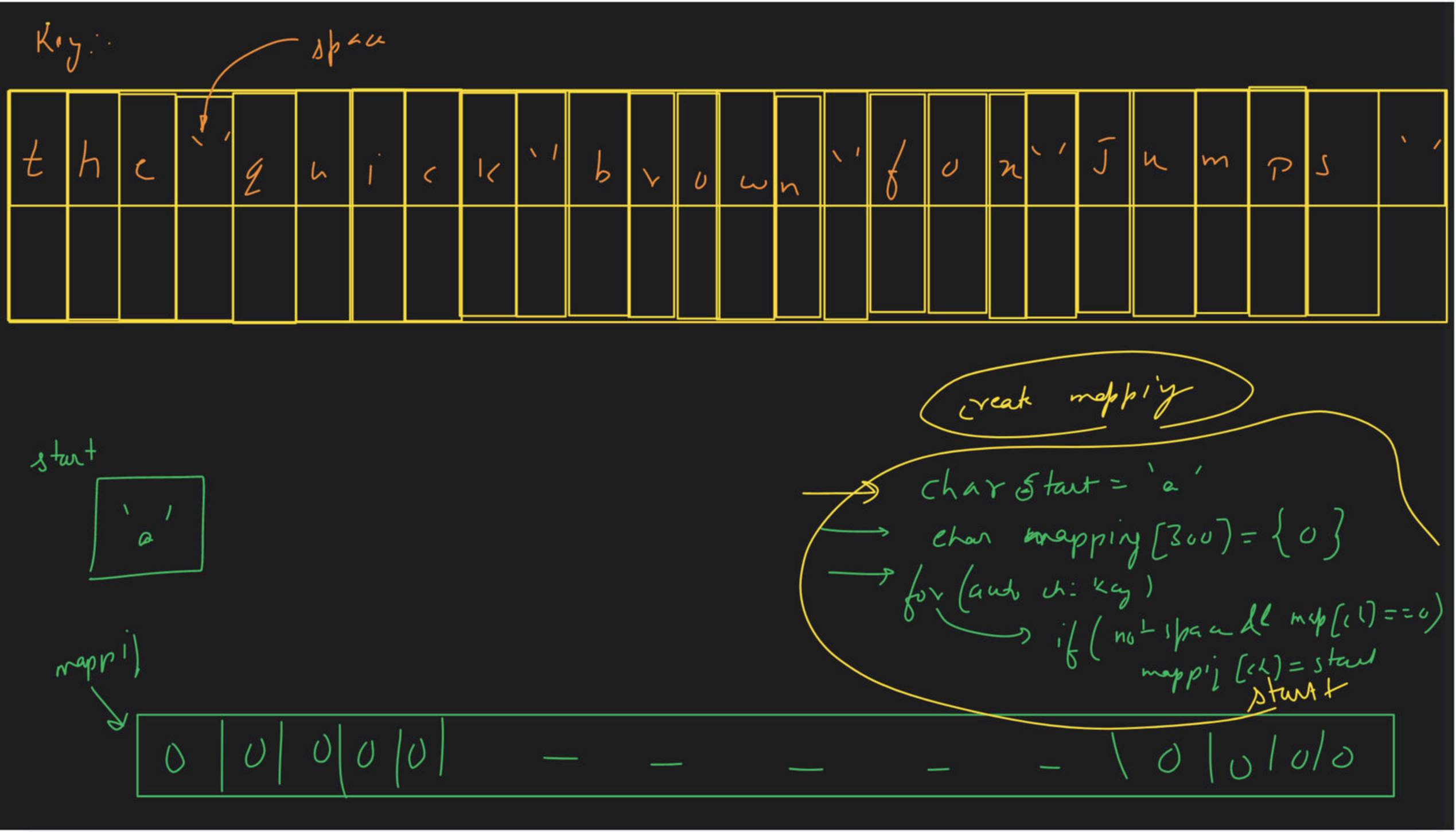
message:

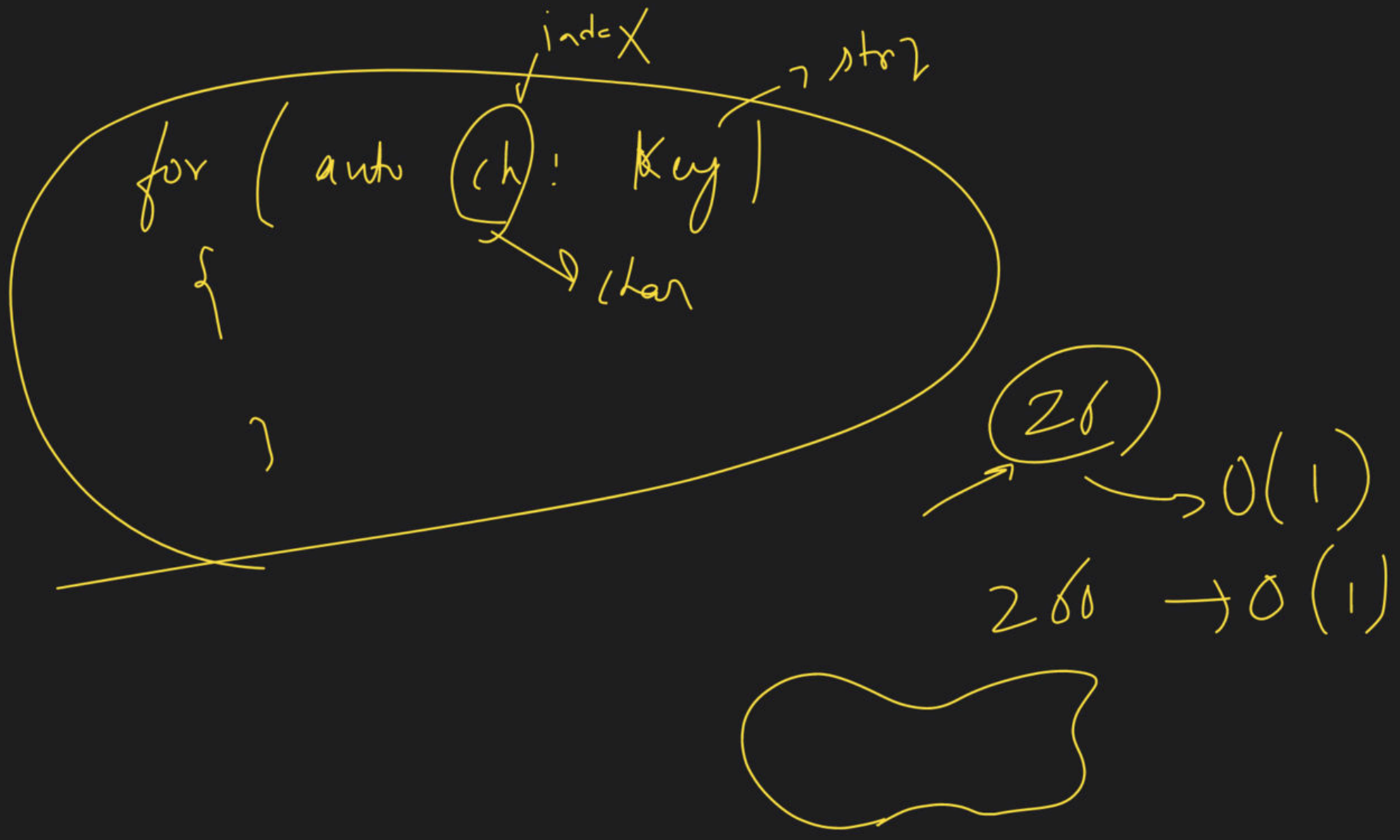


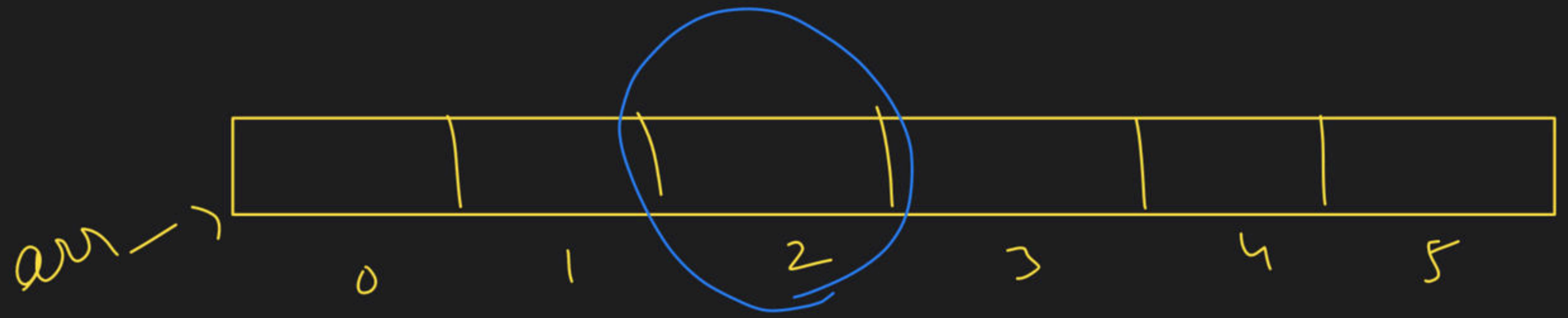





300
char arr[1000]
O(1)
Key
approach
(A) create mapping
(B) use mapping decode
message
Vbsu
Vijt
tide
tfg
final Answer


Key:
space
t h e ' ' q u i c k ' ' b r o w n ' ' f o x ' ' j u m p s ' '
start
' '
a
create mapping
char start = 'a'
char mapping[300] = {0}
for (auto ch: key)
if (not space && map[ch] == 0)
mapping[ch] = start
start++
mapping
0 0 0 0 0 _ _ _ _ _ \ 0 0 0 0


index
str2
for (auto ch : key)
{
}
char
26
O(1)
26 → O(1)

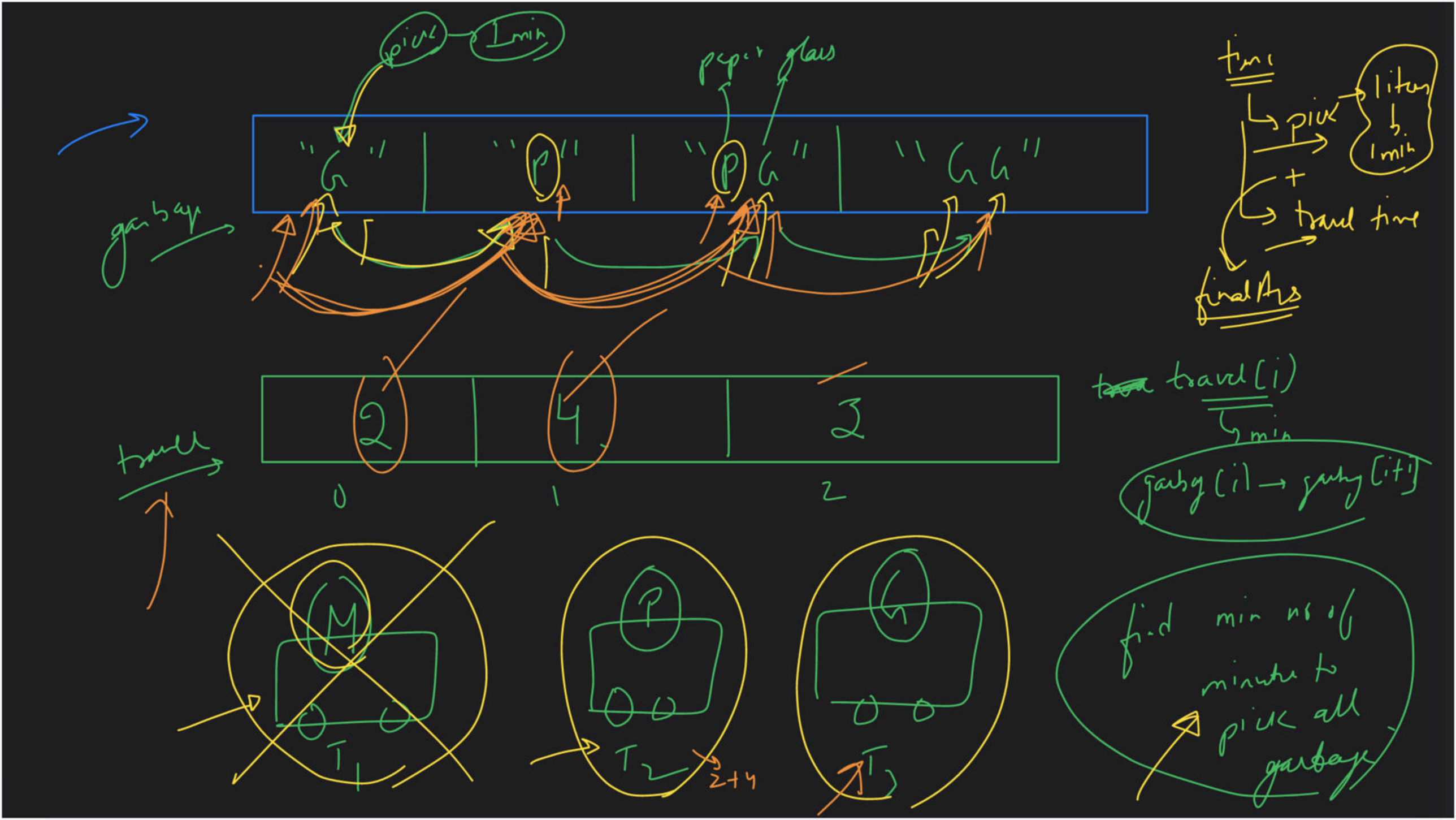


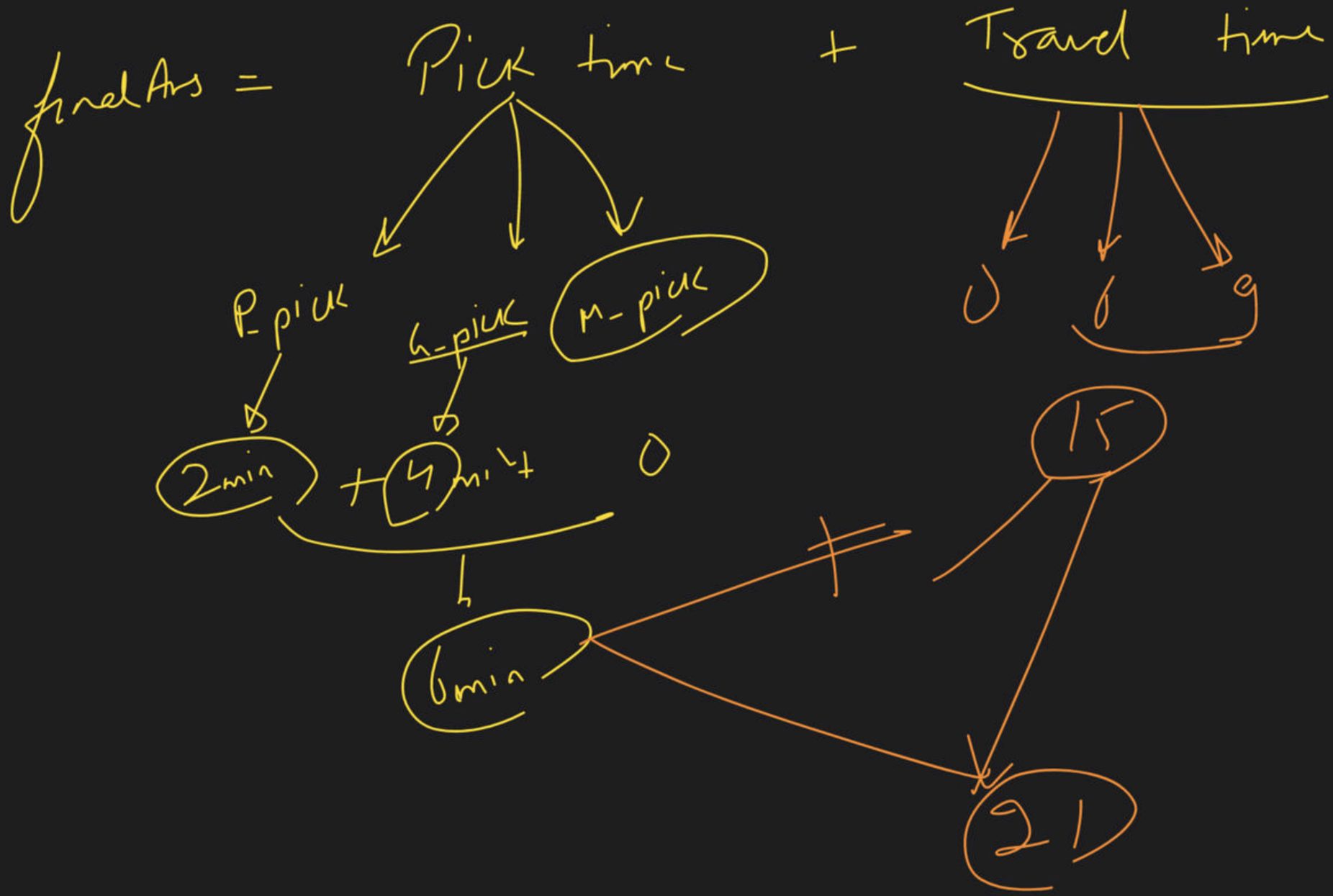
arr [2]

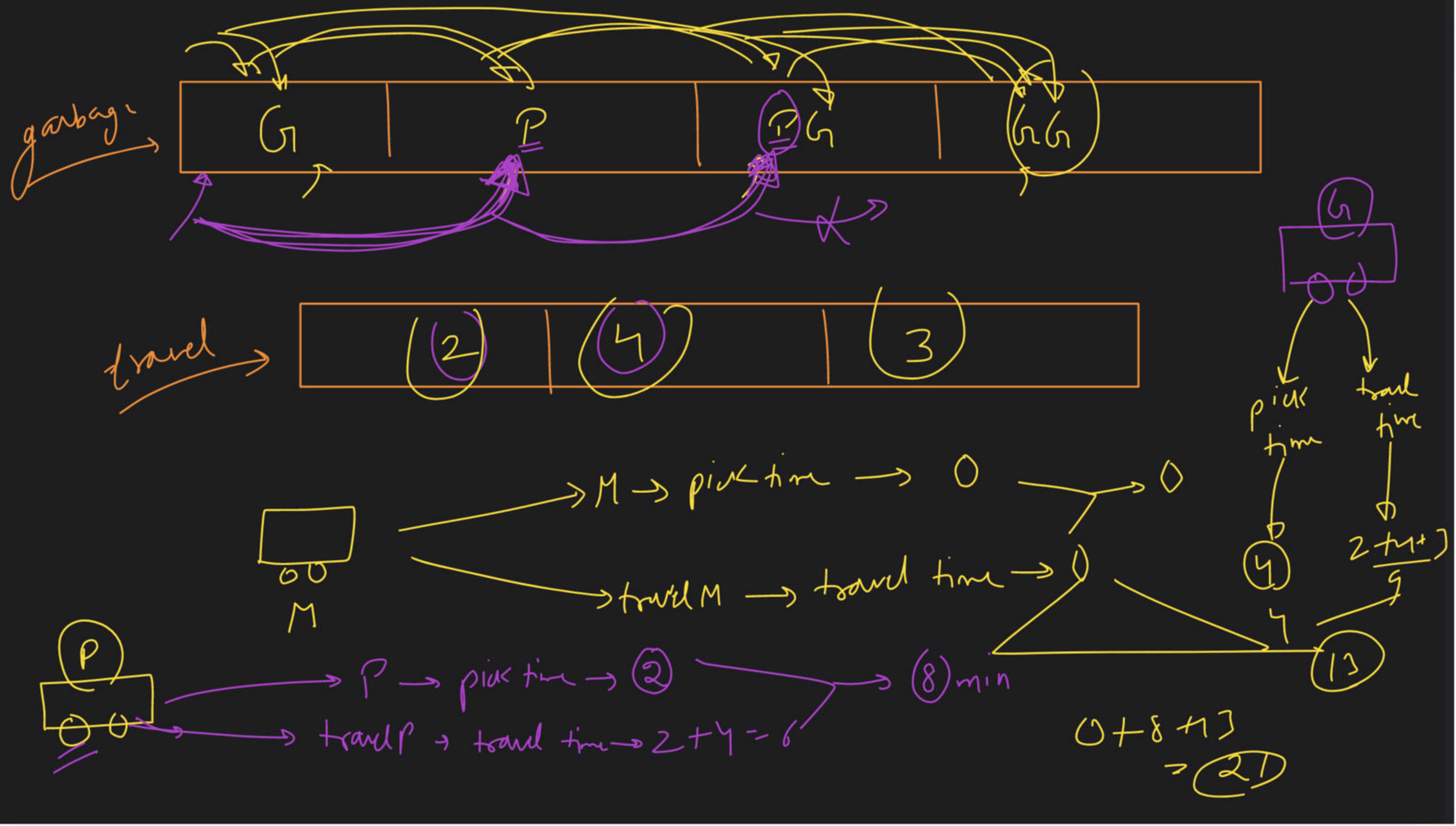
ch = 'a'

97

mapping [ch]


pick
1 min
paper glass
garbage
2
4
3
0
1
2
travel
travel(i)
min
garbage[i] → garbage[i+1]
time
pick
1 item
1 min
+
travel time
final Ans
M
T1
P
T2
2+4
G
T3
find min no of minute to pick all garbage


finalAns =
Pick time
+
Travel time
P_pick
G_pick
M_pick
U
G
G
2min
+
4min
0
15
6min
+
21


garbage
G
P
G
G
travel
2
4
3
M
M → pick time → 0
travel M → travel time → 1
P
P → pick time → 2
travel P → travel time → 2+4 = 6
8 min
pick time
travel time
4
2+4+3
5
13
0+8+13
= 21

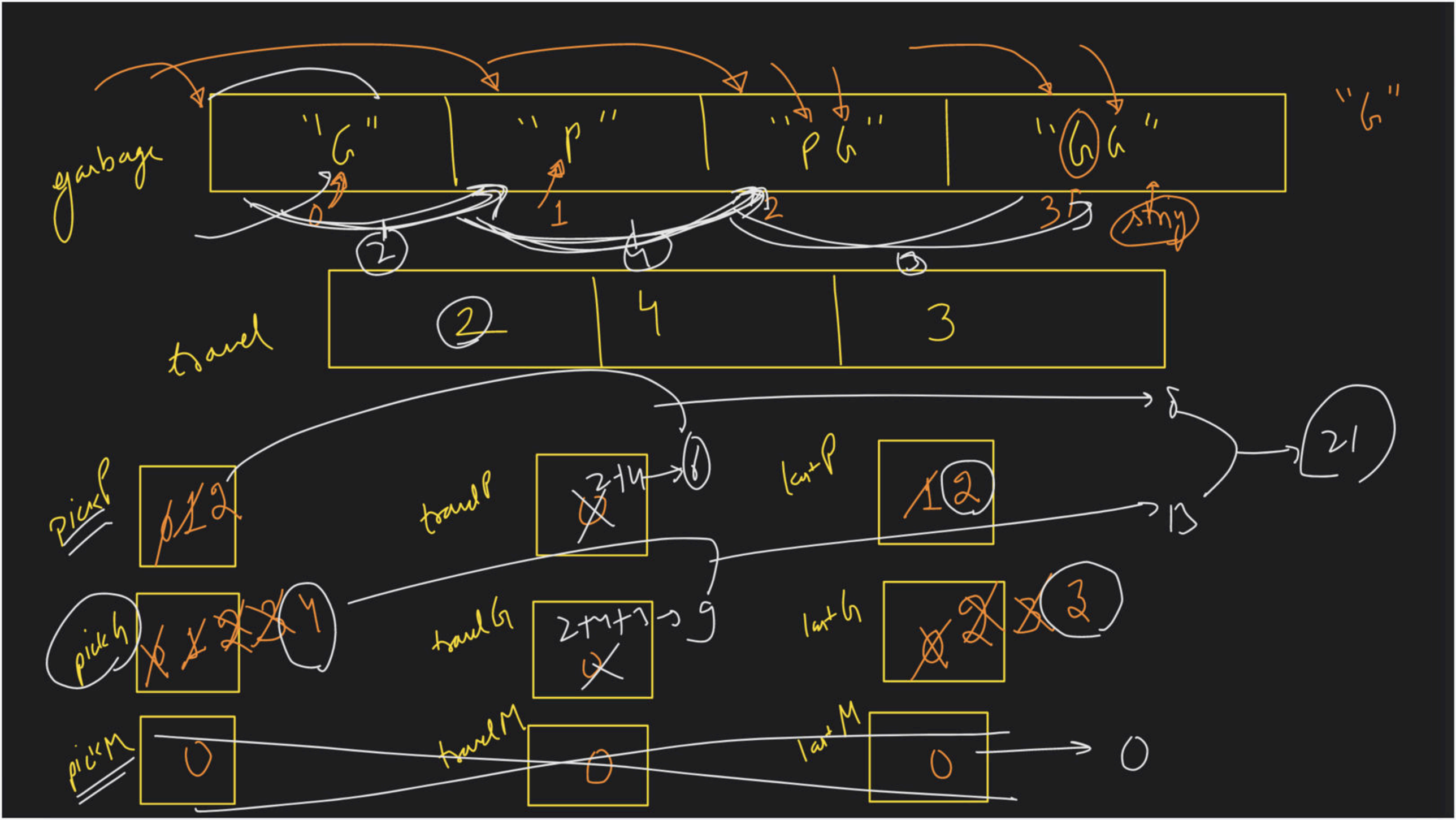
Final Ans = (Pick time + travel time)$_{P\ truck}$

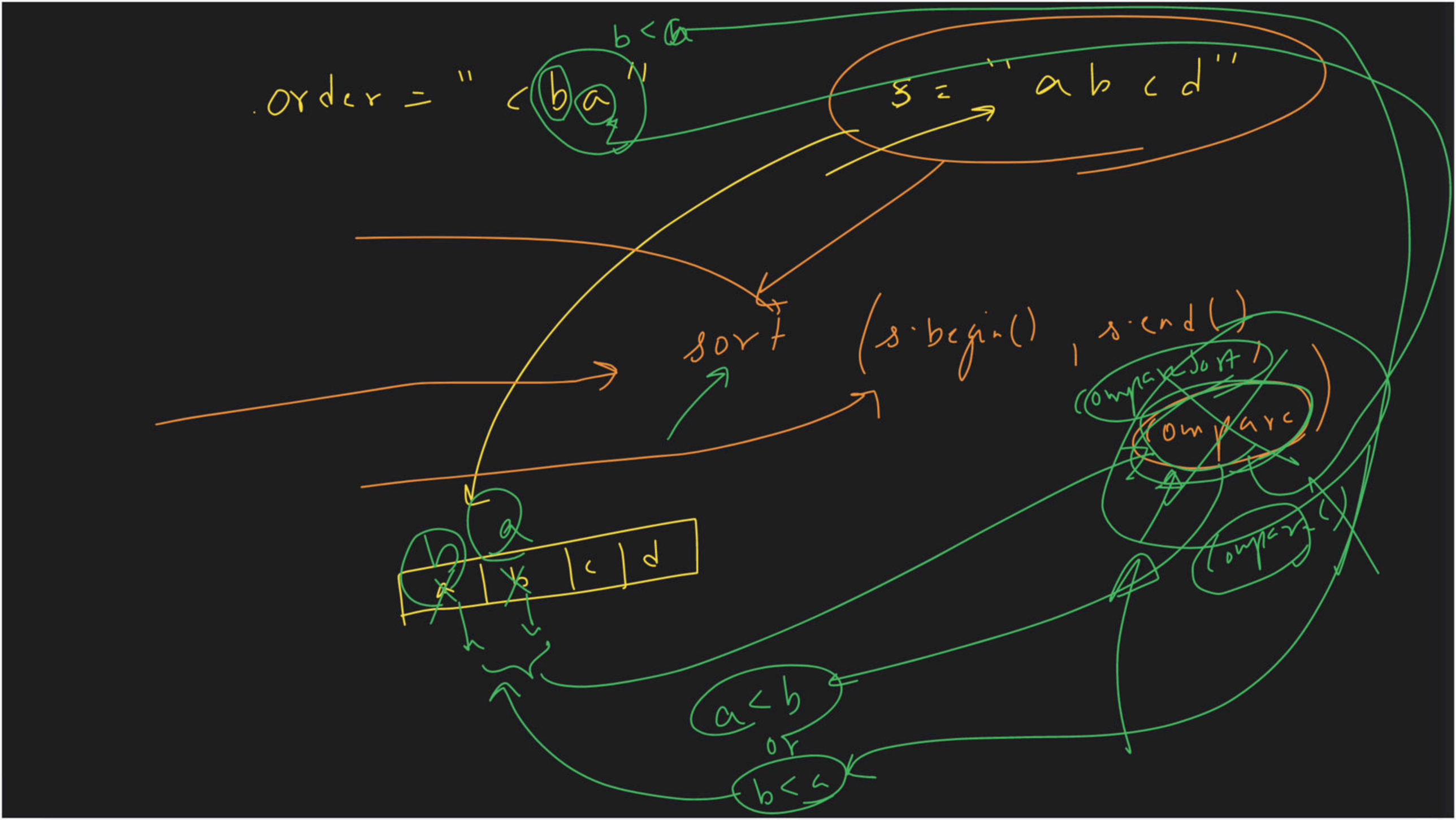
+

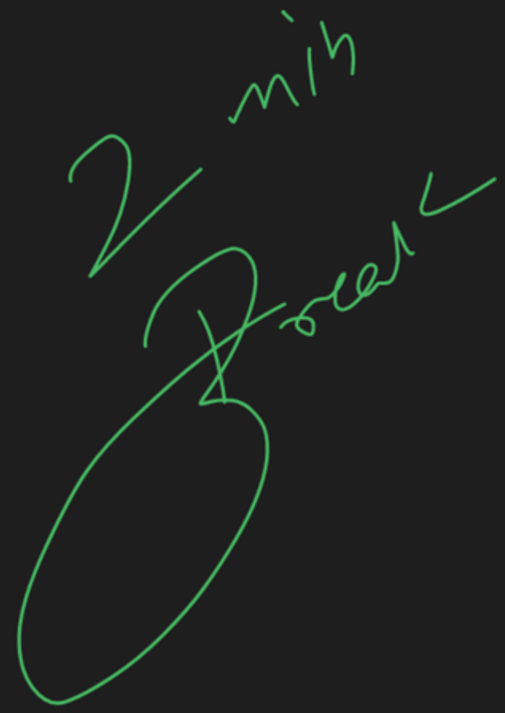
(pick time + travel time)$_{Q\ truck}$

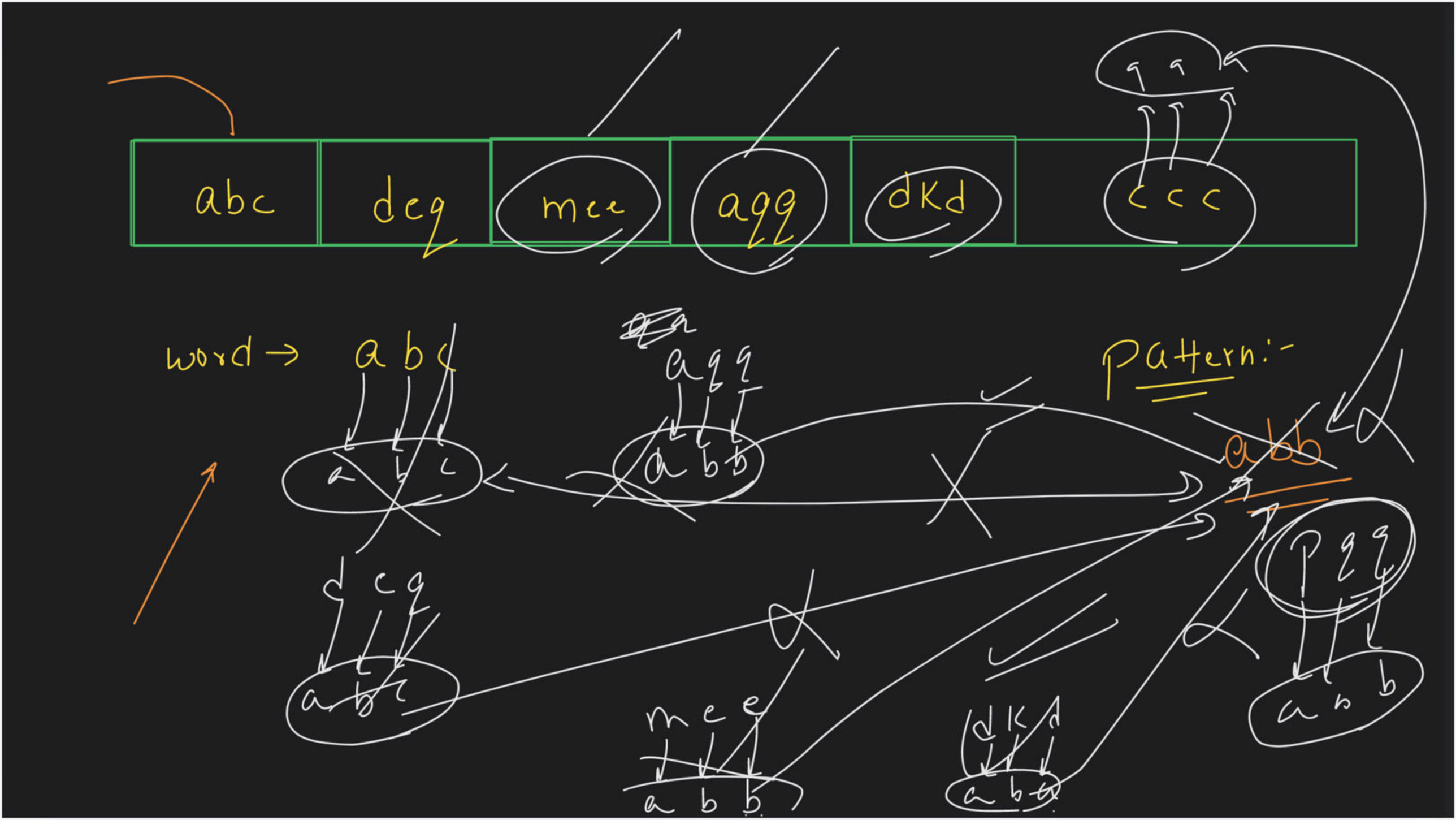
+

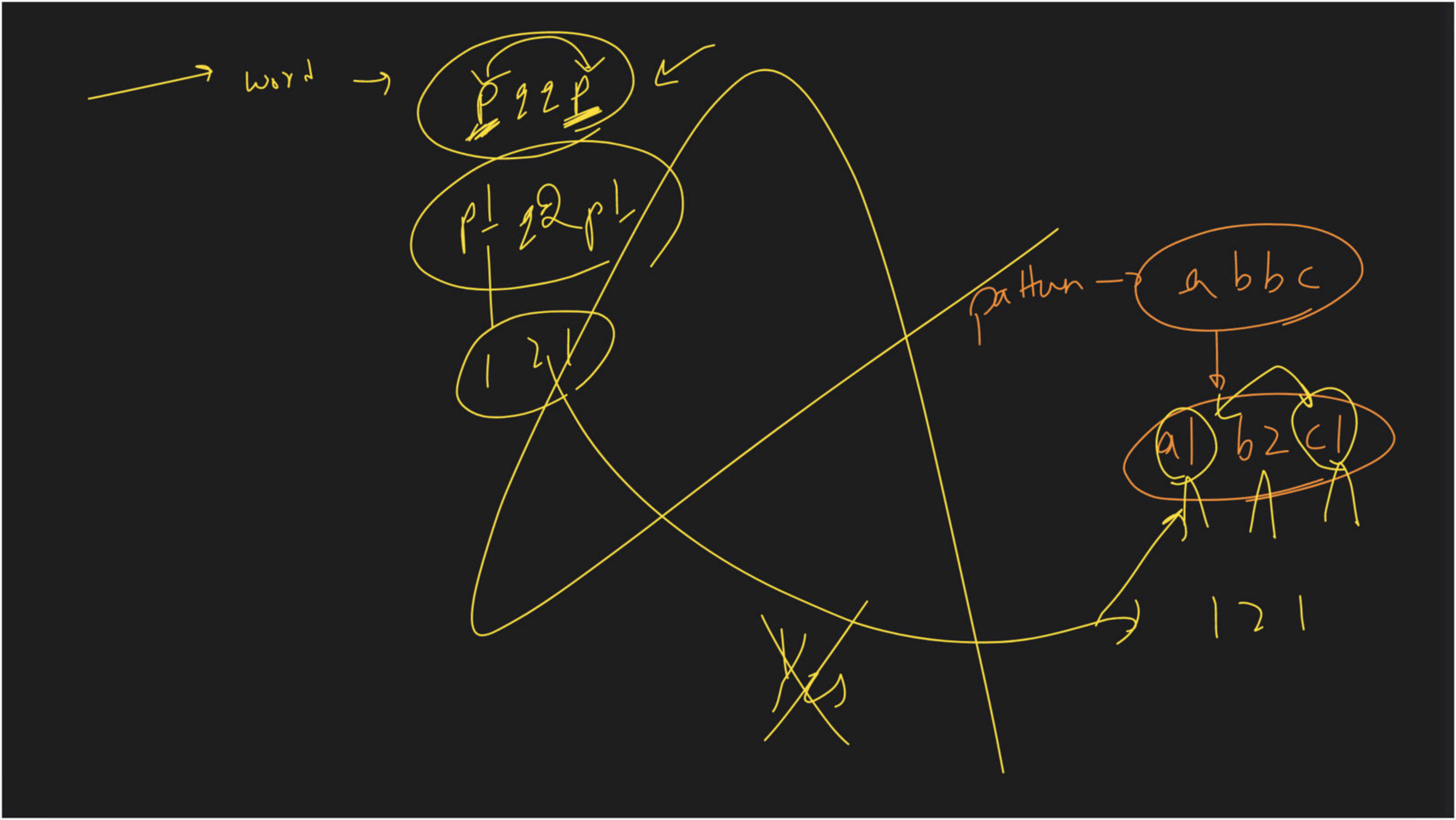
(pick time + travel time)$_{M\ truck}$

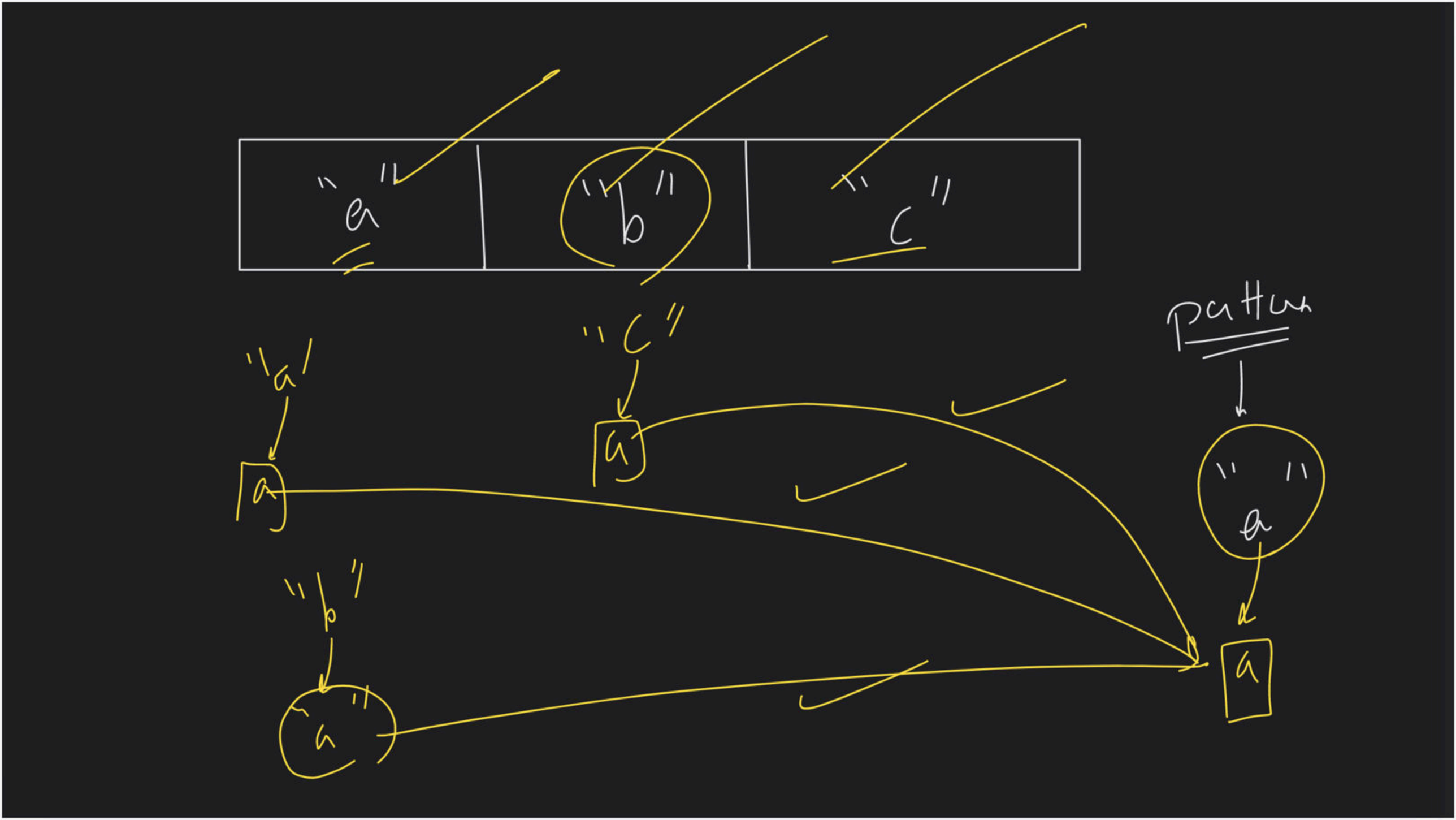

garbage
"l G"
"p"
"p G"
"G G"
"G"
0
1
2
3
stay
travel
2
4
3
pickP
travelP
lastP
pickG
travelG
lastG
pickM
travelM
lastM
0
21
13

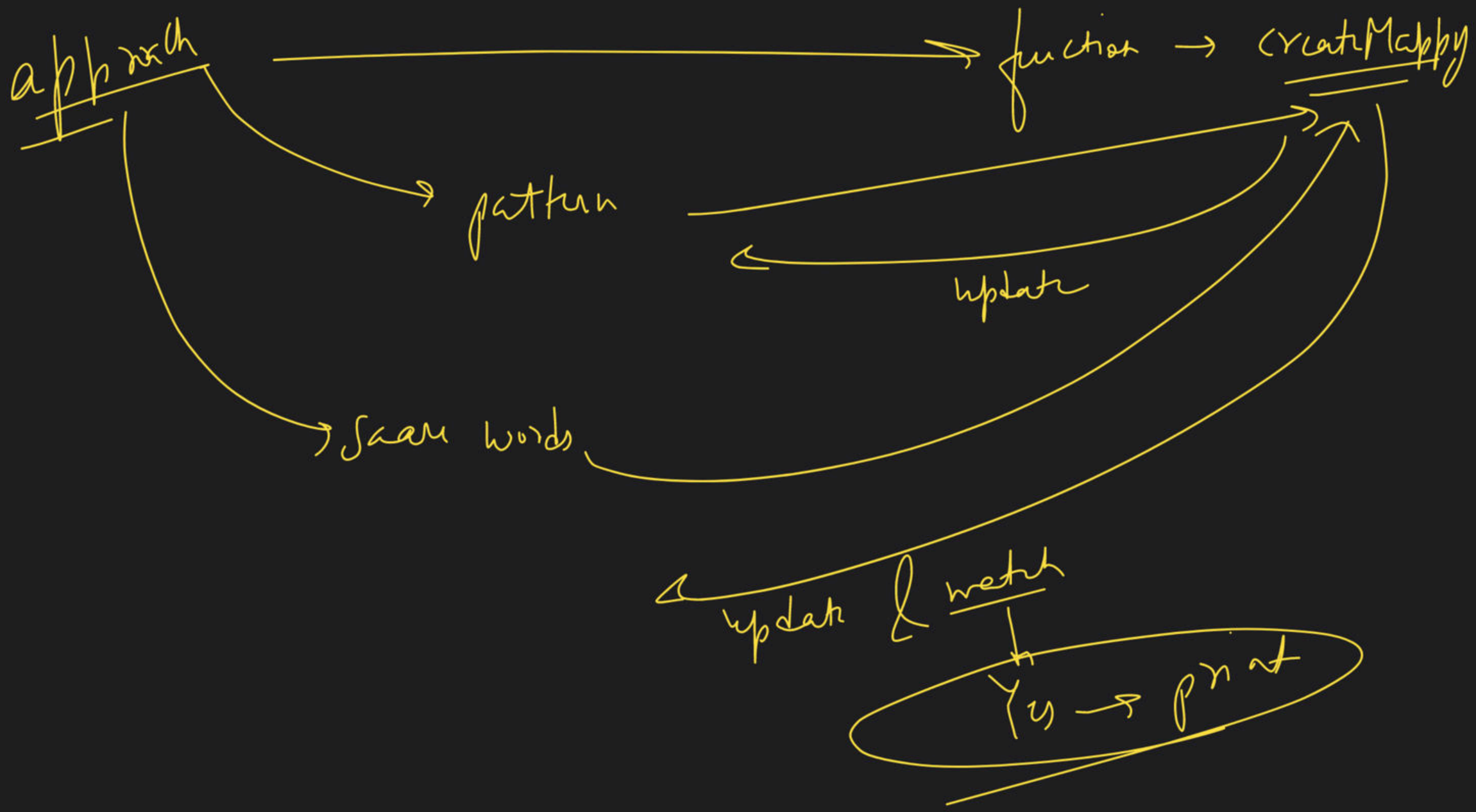

b < a
order = " < (b a) "
s = " a b c d "
sort
(s.begin() , s.end())
compare_sort
compare
compare()
a
b
c
d
a < b
or
b < a

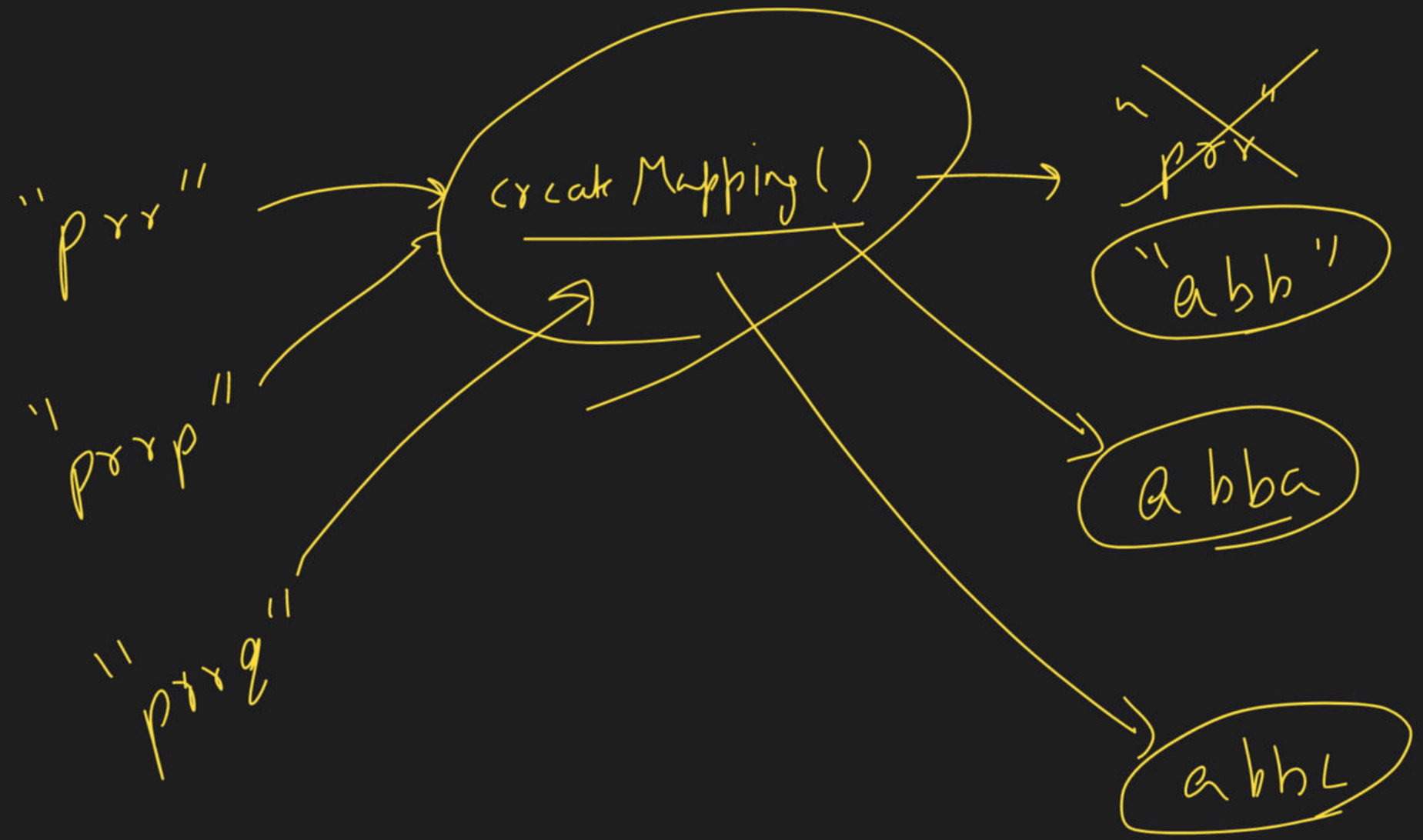


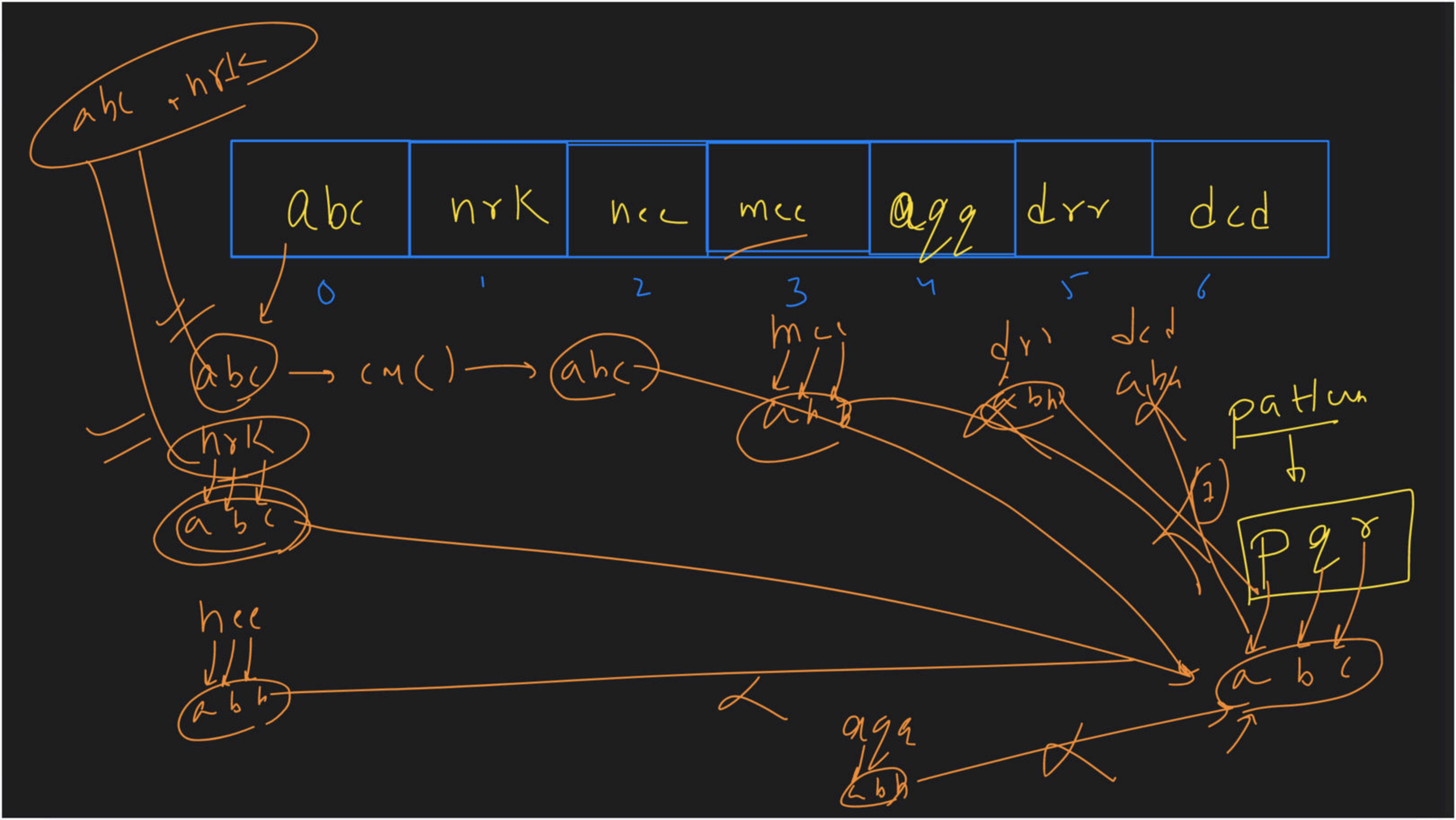

abc
deg
mee
agg
dKd
ccc
word →
abc
agg
abb
pattern:-
abb
deg
mee
abb
dKd
abb
ggg
abb

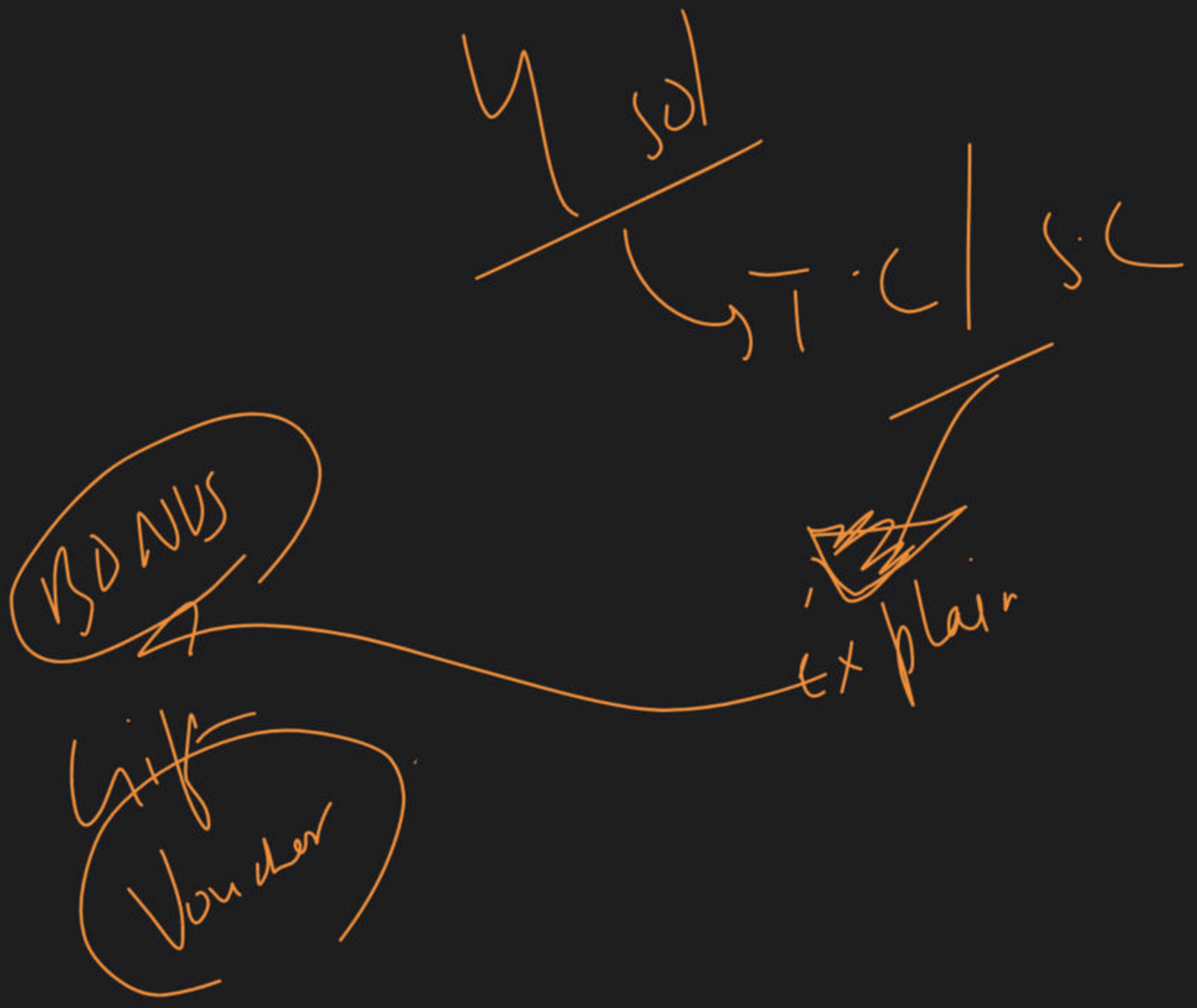

word
p q q p
p 1 q 2 p 1
1 2 1
pattern
a b b c
a 1 b 2 c 1
1 2 1


"a"
"b"
"c"
"a"
"c"
a
a
"b"
b
Pattern
"a"
a
a


approach
function → createMapObj
pattern
update
scan words
update & match
Yes → print


"prr"
"prrp"
"prrq"
createMapping()
"abb"
abba
abbL


abc
nrK
ncc
mcc
aqq
drr
dcd
0
1
2
3
4
5
6
abc
cm()
abc
mcc
drr
dcd
pathcm
nrK
abc
1
Pqr
ncc
abh
abc
aqq
abh


BONUS
Gift
Voucher
explain