

# Word Search II

Saturday, 27 November 2021

11:00 AM

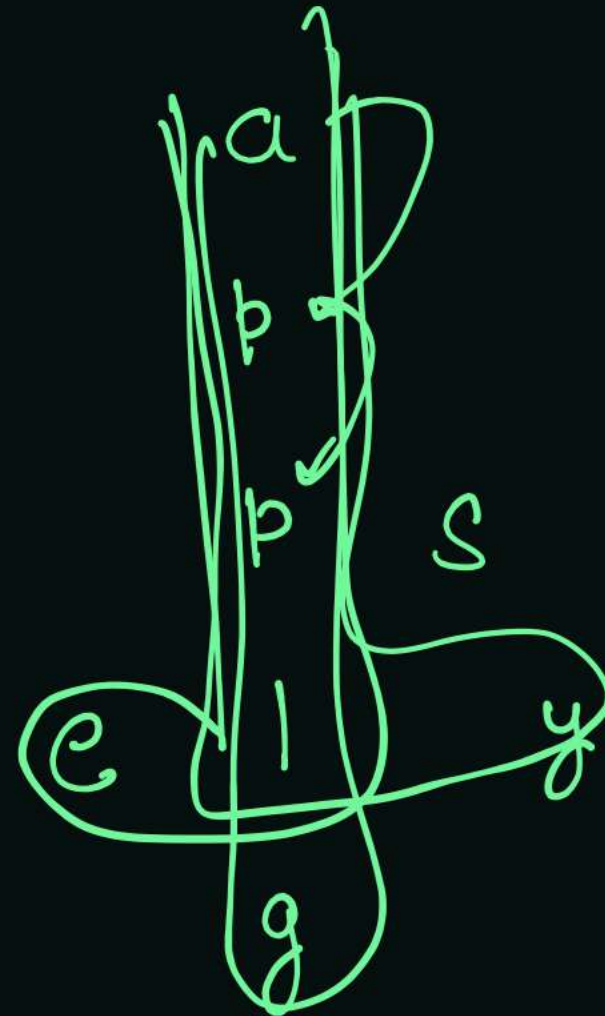
O	A	A	N
E	T	A	E
I	H	K	R
I	F	L	V

oath pea eat eatat rain

Result → oath, eat

## Brute force

- ① Pick a word and find it in cell.

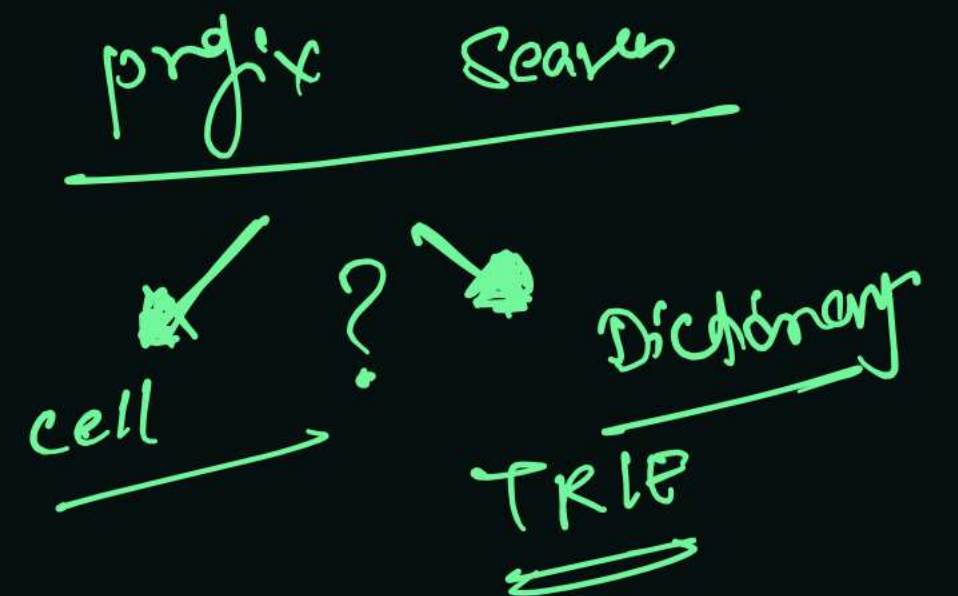
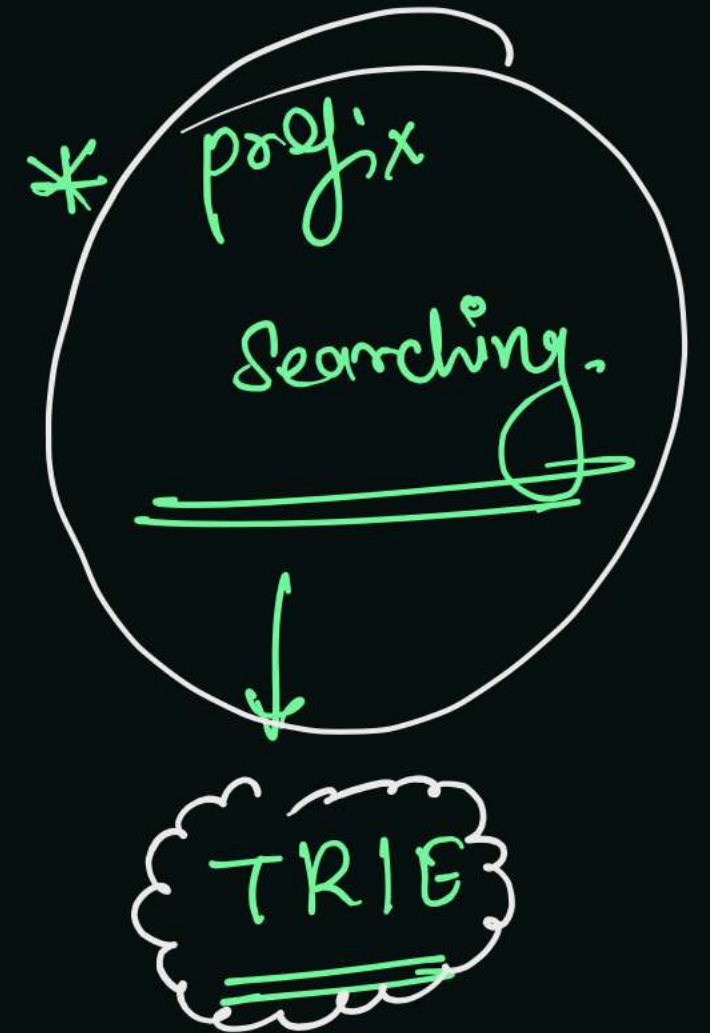


Top left down Right

pr  
a  
ap  
app  
app(s)

appl  
apply

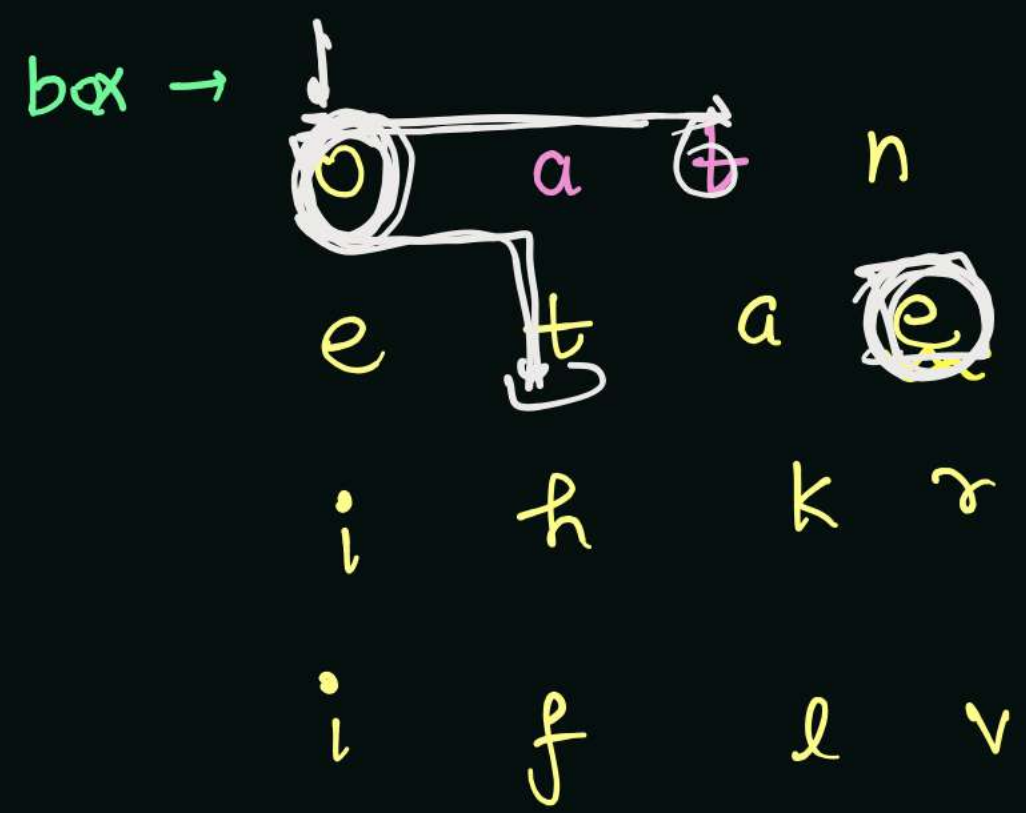
apple  
applg





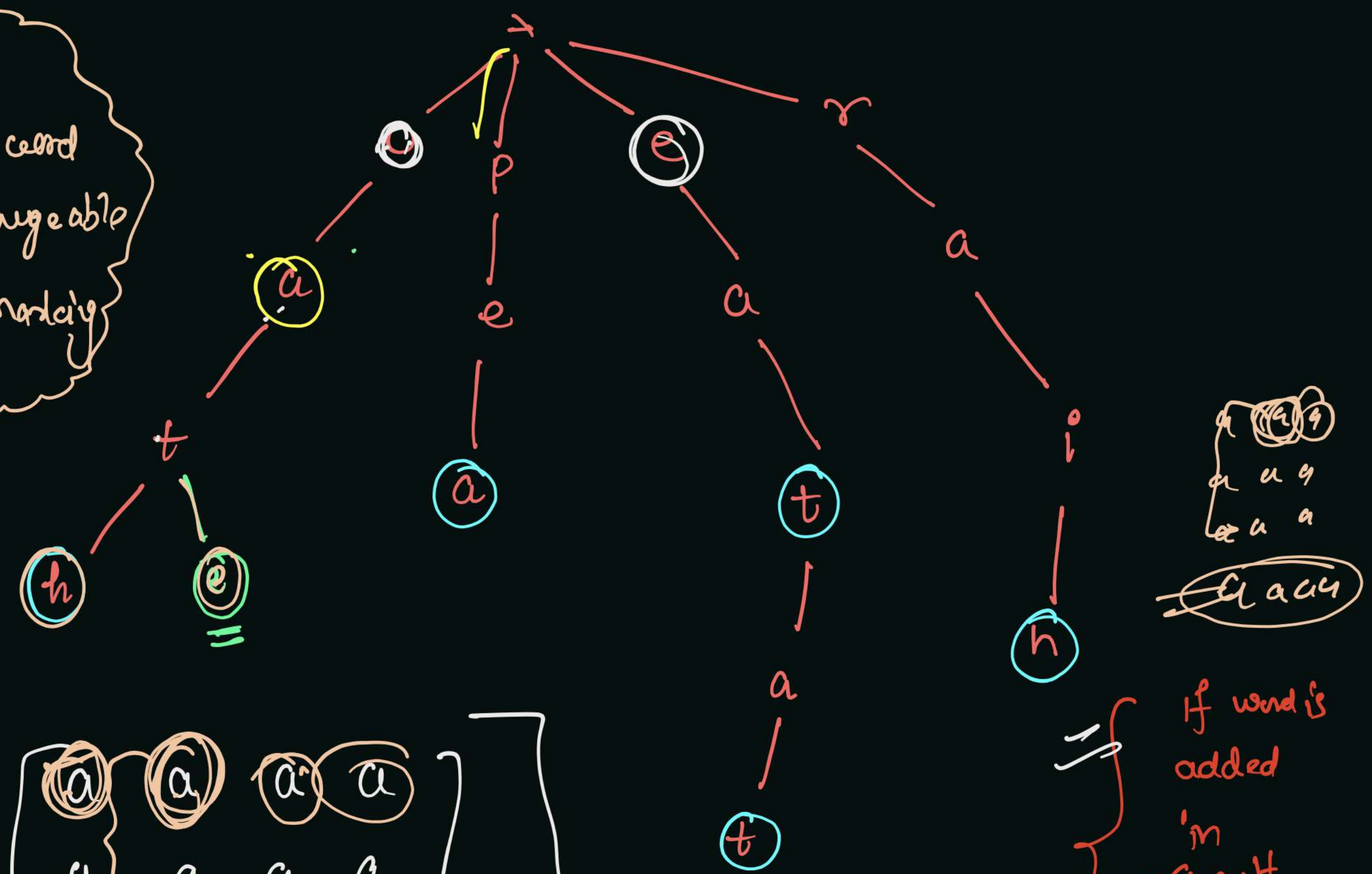
Words → oat bath pea eat eatat rain ate

grid



Already added word is mergeable with unmarked of is End

prefix Search tree



to be

visited

result →

word

1	a	a	a	a	a	a	a	a	a
2	a	a	a	a	a	a	a	a	b
3	a	a	a	a	a	a	a	a	c
4	a	a	a	a	a	a	a	a	d
5	a	a	a	a	a	a	a	a	e
6	a	a	a	a	a	a	a	a	f

grid

a	a	a	a
a	a	a	a
a	b	c	a

If word is added in Result is End = False

Words → oat oath pea eat eat at rain ate

gnd:

box →

o	a	t	n
e	t	a	e
i	h	k	r
i	f	l	v



sentence = "the cattle was rattled by the battery"

④ 5-  
+ 62  
+ 45

the cat was sat  
by the

For HashMap →

Handwritten diagram illustrating the construction of the word "cattle" from individual letters:

- c
- a
- t
- t
- l
- e

The final word formed is **cattle**.

ca ✓  
cent ✓  
Catt ✓  
catt ✓  
catt ✓  
cattle ✓

$O(n^2)$

ከጊዜህ፡

bat

list not 2 (10)

Confused

TRIZ

ms<sup>2</sup>

H. Mals

bat  
rat  
cattl

Cop	Course	Cat	at
-----	--------	-----	----

C - fat

H. Pahl

$C \rightarrow F$   
 $C \rightarrow T$   
Cat

ber  
bar  
barr

$\left[ \begin{array}{c} \text{Rat} \\ \text{Rat} \\ \text{Rat} \end{array} \right]$

*Maxim*



## Strategy

complex!)

$$O(n)$$
$$\frac{OC + P}{OC}$$

$f - f - 2x$

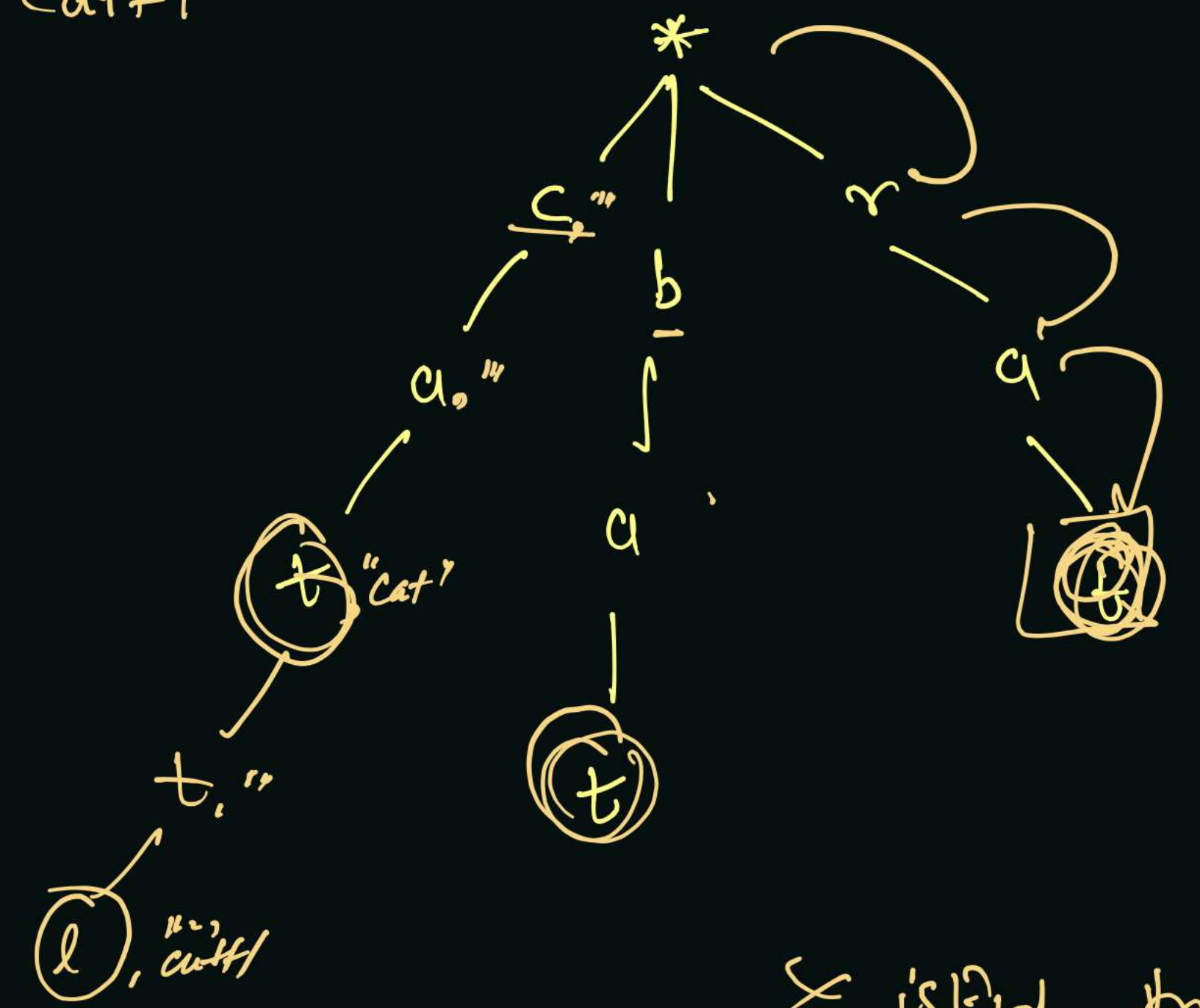


dictionary = ["cat", "bat", "rat"] cattle limited by quality question.  
 sentence = "the cattle was rattled by the battery" cattle

word = ~~the~~ ~~cattle~~ ~~was~~  
↑ ↑↑↑  
rattled

result → the \_ cat \_ was \_ rat \_ ~~but~~ by the -

split → StringTokenizer Delimit



is it a string (cat)  
 other false  
 string = cat