Data Science & AI
&
NIC - Param

Python-For Data Science

Dictionary

Lecture No.- 02

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Recap of Previous Lecture

Topic Dictionary

Topics to be Covered

Topic	Problem Solving

Topic : Problem Solving

d = {2: 'Pankaj', 3: 'Aakash'}

a = d[1] KeyError

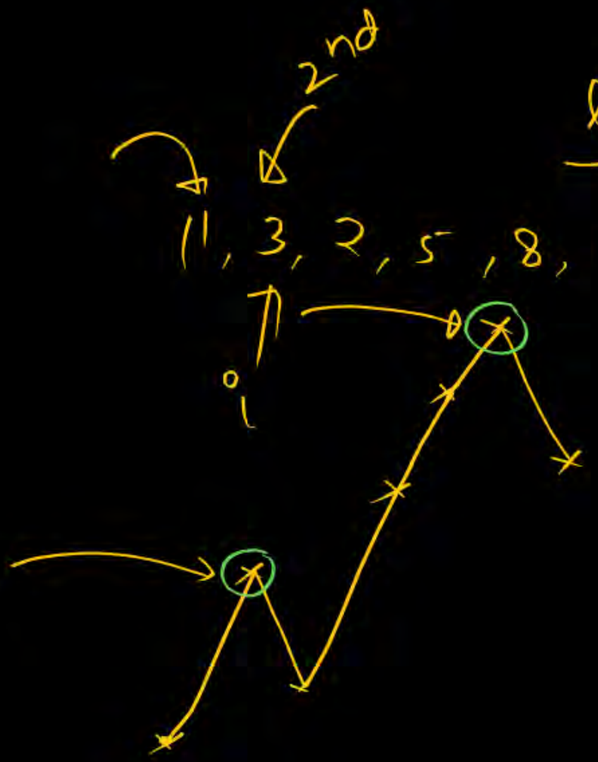
value corresponding to key (1) → exist ✗

d[1] = 4 ✓ ⇒ if (key 1) is not present then add pair (1,4) to dict

KeyError

d[1] = d[1] + 1

① Peak element



array : 10

list : 10

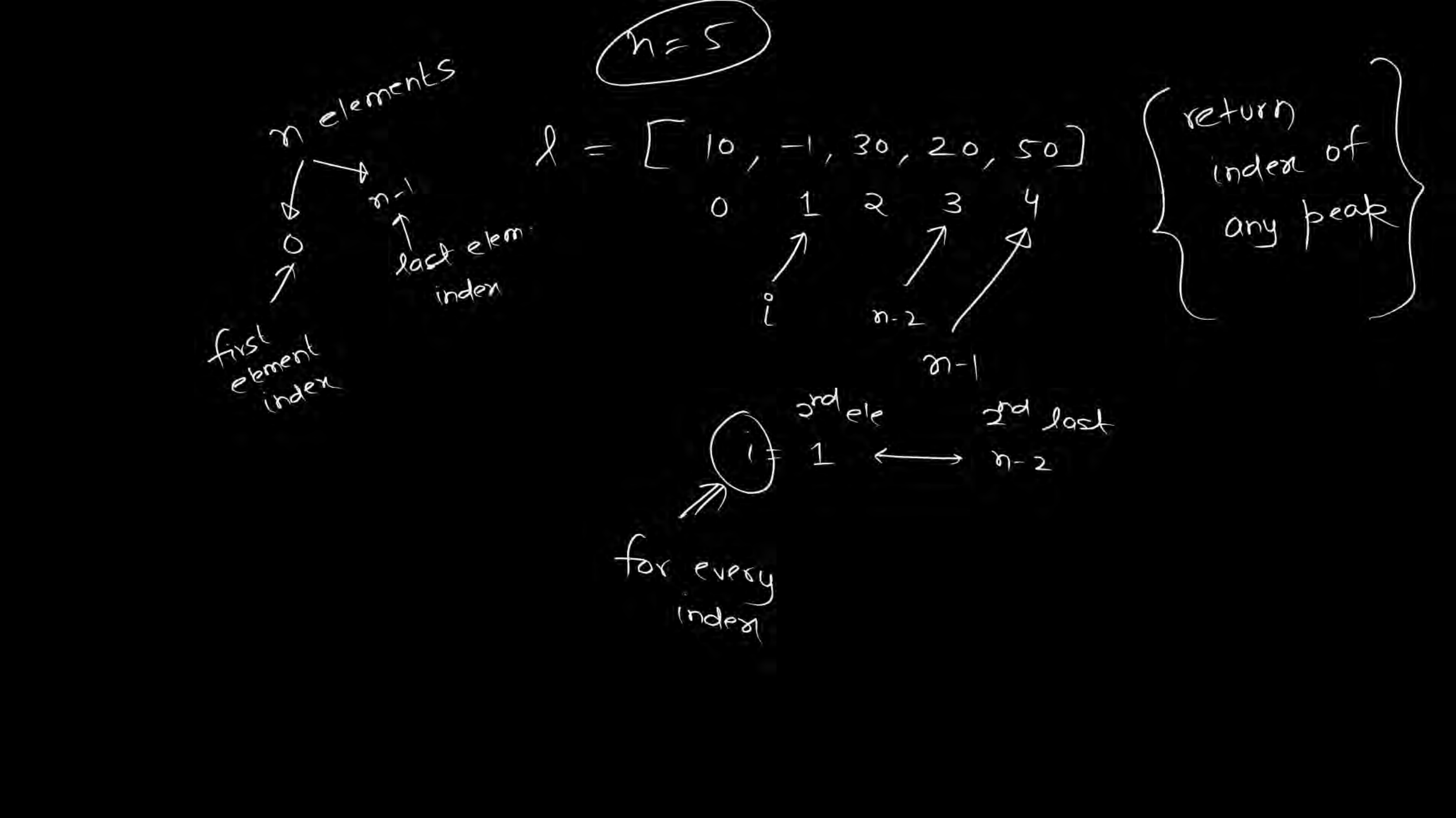
list[i] >= list[i-1]

and

list[i] >= list[i+1]

elem at index i

⇒ Peak


n = 5
n elements
0
first element index
n-1
last elem index
l = [10, -1, 30, 20, 50]
0 1 2 3 4
i
n-2
n-1
return index of any peak
for every index
1
3rd ele
2nd last
1 ⟷ n-2

reversed( )

×

s[::-1]

×

"Pankaj"

String / List → Reverse

P	a	n	k	a	j
0	1	2	3	4	5

① 1st — last swap

swap l[0] , l[5] ⇒ 2 ele ✓

② 2nd — 2nd last

l[1] , l[4]

③ 3rd — 3rd last

l[2] , l[3]

"Pankaj"

String → Reverse
List →

P	a	n	K	a	j
0	1	2	3	4	5

i	j
l[0]	l[5]
l[1]	l[4]
l[2]	l[3]

(i,j)

0	5
1	4
2	3

⇒ i+j = 5

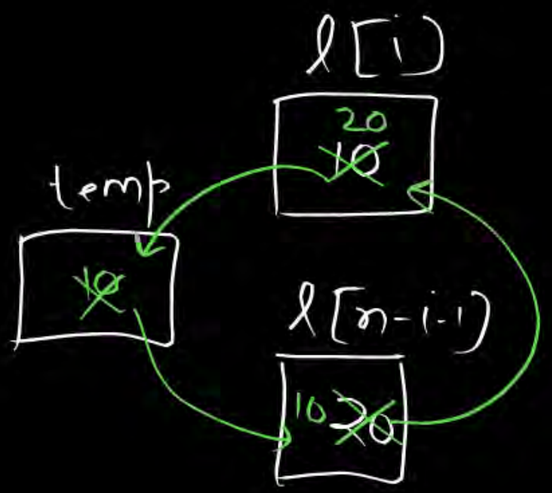
i+j = n-1

j = n-i-1

function

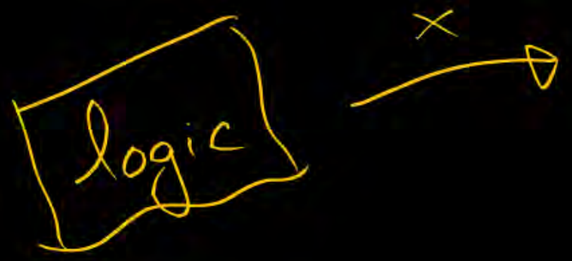
```
l = list(str)
for i in range(0, n//2):
    temp = l[i]
    l[i] = l[n-i-1]
    l[n-i-1] = temp
s = ''.join(l)
```

s[::-1]



```
l = [1, 2, 1, 3, 1, 4, 4, 1]
x = 1
```

find no. of occurences of x in l

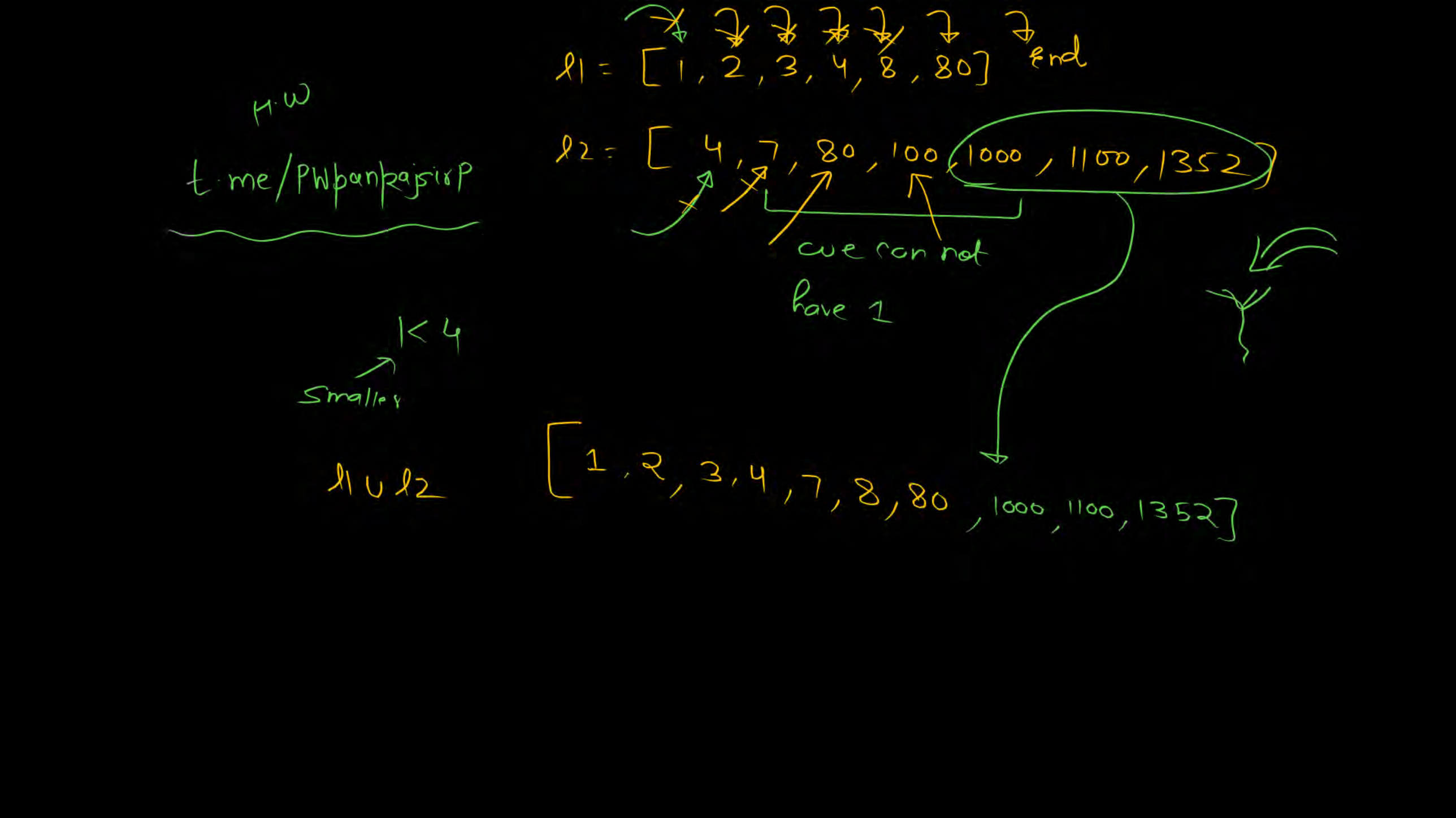


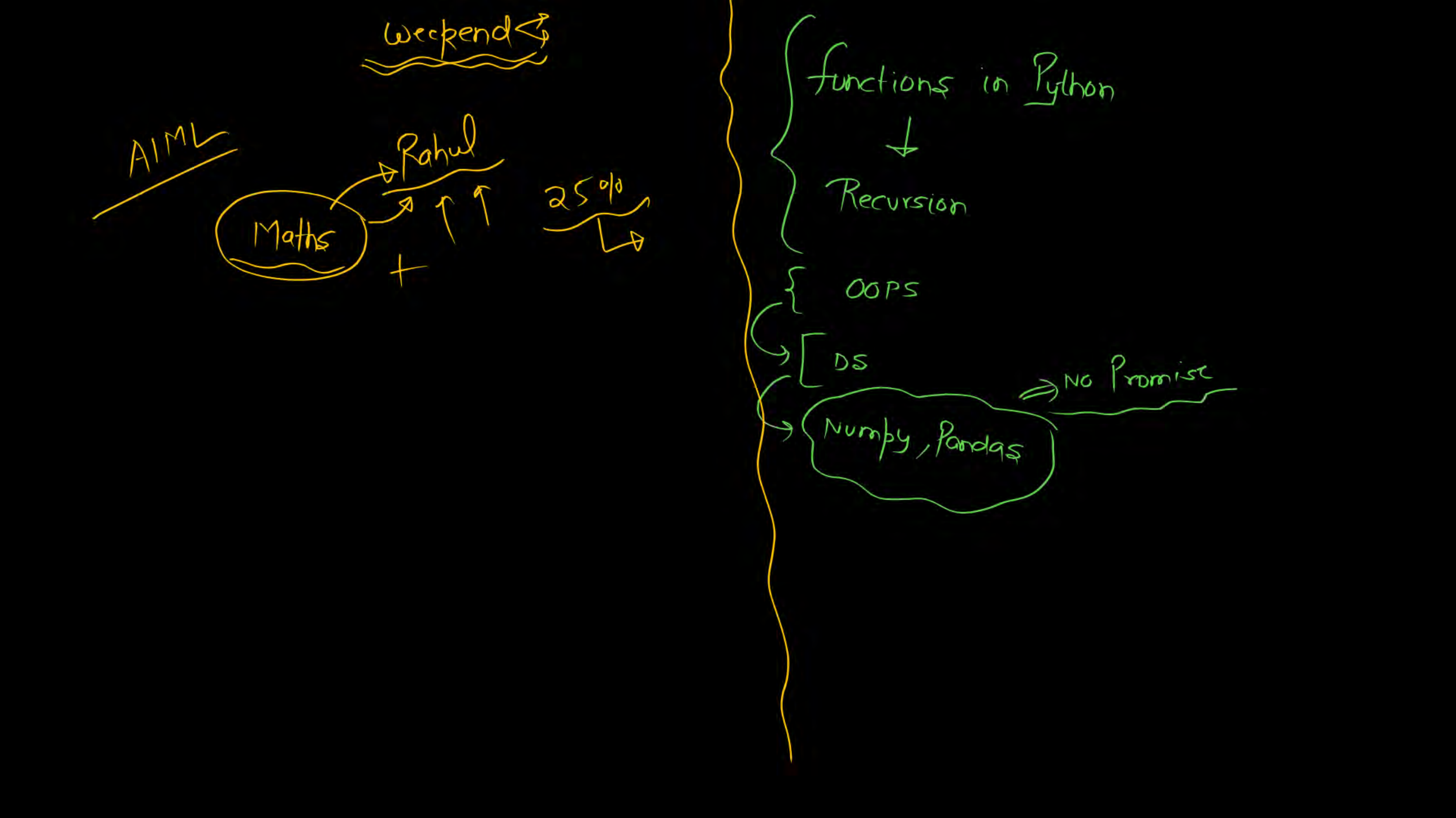
① dict $\overrightarrow{a}$

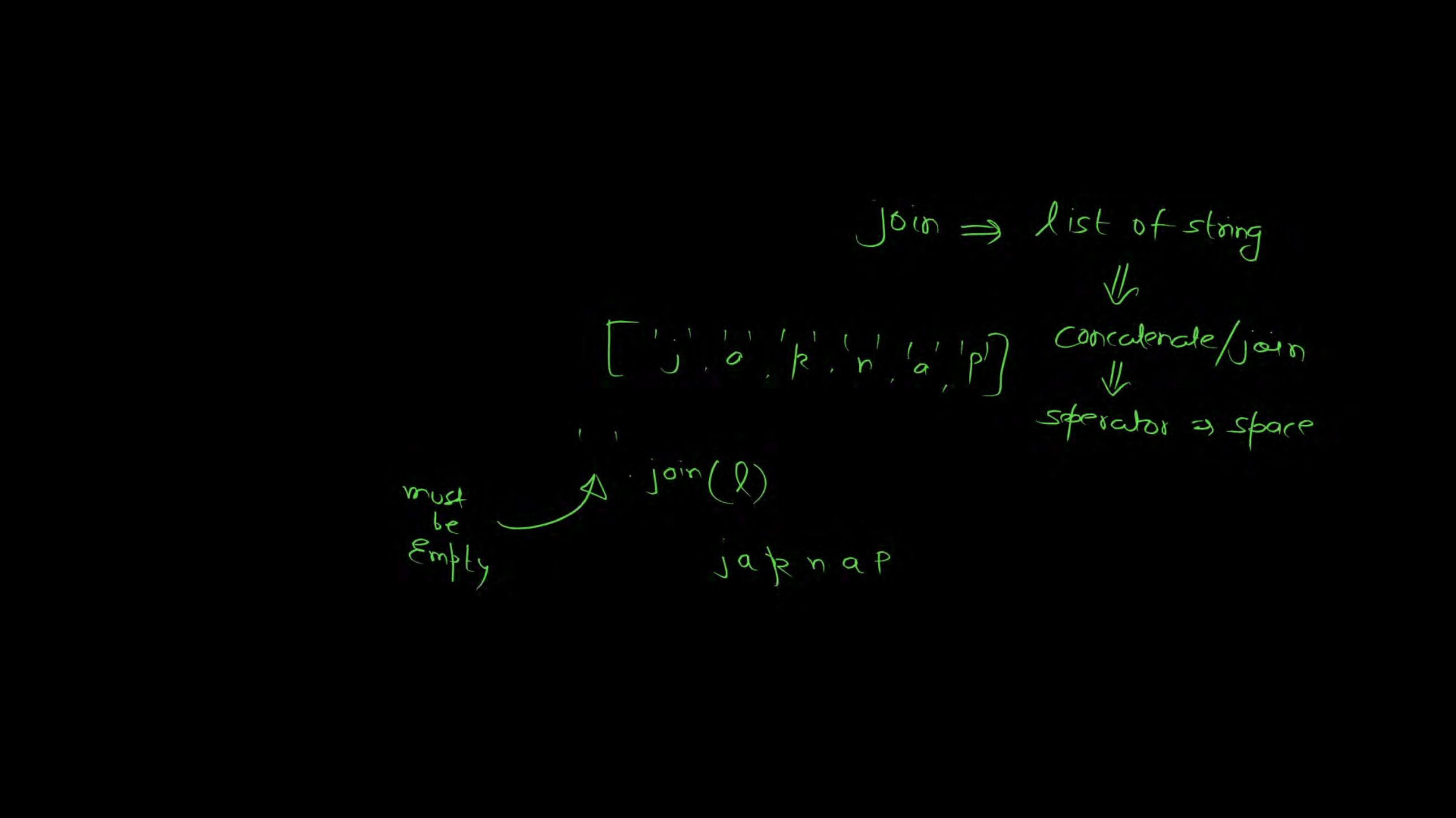
```
l = [1, 2, 1, 3, 1, 4, 4, 1]
x = 1
c = 0
for i in range(0, len(l)):
    if(x == l[i]):
        c = c + 1

print(c)
```

```
l1 = set(arr1)
l2 = set(arr2)
l = list(l1.union(l2))
return l
```

Algorithm ✓ Time comp:
→ more


H.W
t.me/PWpankajsirP
l1 = [1, 2, 3, 4, 8, 80]
end
l2 = [4, 7, 80, 100, 1000, 1100, 1352]
cue can not have 1
1 < 4
Smaller
l1 U l2
[1, 2, 3, 4, 7, 8, 80, 1000, 1100, 1352]


weekend
AIML
Rahul
Maths
25%
+
functions in Python
Recursion
OOPS
DS
Numpy, Pandas
No Promise


join ⇒ list of string
⇓
concatenate/join
⇓
seperator ⇒ space
['j', 'a', 'k', 'n', 'a', 'p']
must be Empty
''.join(l)
jaknap

THANK - YOU