29 Friday May 2015

149-216

Democracy Day (Nigeria)

wk - 22

Appointments

8 **3Sum**

9 a = [-1, 0, 1, 2, -1, -4]

10 [-1, 2, -1] No repetition

11 [0, 1, -1]

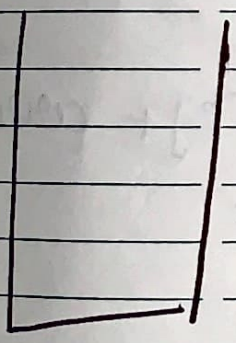
12 

arr[i] + arr[j] + arr[k] = 0

13 -(arr[i] + arr[j]) = arr[k]

14 Hashing i=0, j=1

15 **$i_0 = j_1 = k$**

16 

17 arr[ ] = [-1, 0, 1, 2, -1, -4]

↑i ↑j

Step1

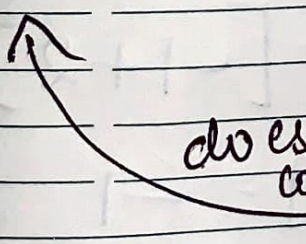
18

19 arr[k] = arr[i] + arr[j]

= -1 + 0

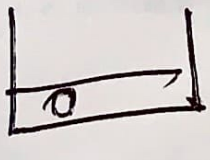
= -1

20 does not contain so shift j pointer & add j to hash



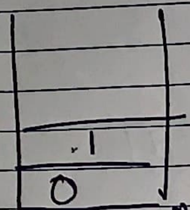
June

M	T	W	T	F	S	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					



Hashing

Step2



i=0 j=2

arr[k] = -(arr[i] + arr[j])

arr[k] = -(-1+1)
= 0

contains.

insert triplet -1,0,1 in matrix triplet

so add arr[j] i.e 1 to Hash

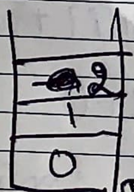
(-1, 1, 0) → sort

(-1 0 1)

Step 3

arr[k] = -[arr[i]+ arr[j]]

i=0 , j=3



arr[k] = -[-1+2]

arr[k] = -1

doesn't contain

so do not insert the triplet in matrix

put arr[j] in Hash & j++

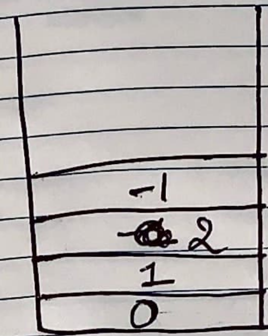
i=0 j=4

Step 4

arr[k] = -[arr[i]+arr[j]]

arr = -[-1+(-1)]

arr = 2



contain

so form triplet [-1, -1, 2]

& add arr[j]

Step5

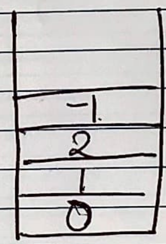
i=0, j=5

arr[k] = -(arr[i]+arr[j])

-(-1-4)

arr[k] = +5

doesn't contain



when i=i+1 clear the hash map