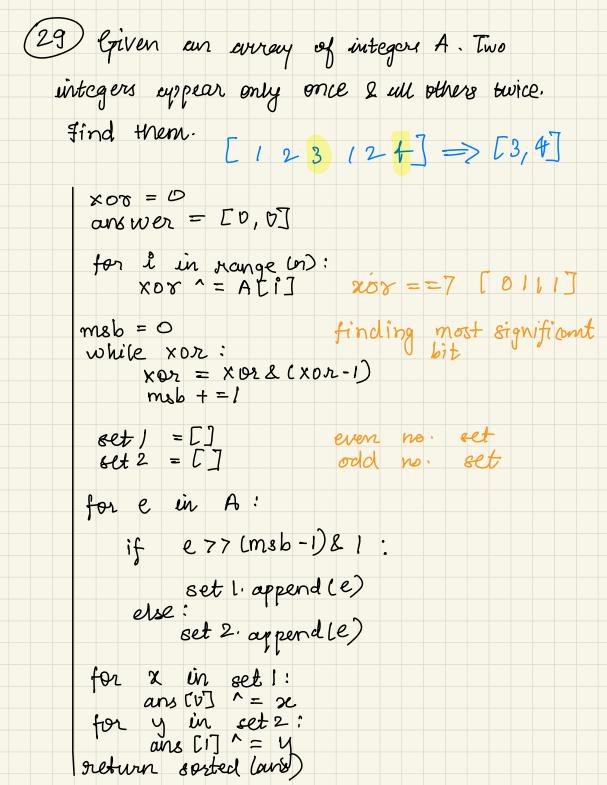
# Lecture 10: Bit manipulation -2 Represent - 3 in binary +3: 00000011 

28	Help from som.			
	Alex solves a questi takes help.	m -> score +1	re doubles	
	Initial score: D Tav	igct: 5	help 1 solves 2 solves 4	
		) help taken	hulp 5	
	if A = = 0: return 0		ght of the	
	ent = 0		is problem	
	while A: $cnt + = 1$ $A = A & LA - 1$	the DN 1	is cheeking	
	return ont			



(30) Marimum Satisfaction loiven an array A on N integers. A[i'] represents quality of the ith fruit. Pick four fruits s.t. satisfaction value will maximum. a 2 b 2 c 2 d Find maximum eatisfaction value. bitwise AND This mecens we have to check which MSB is ON using the integer's 32 bit binary rep for ! in range (32,-1,-1): temp = and |(1<<!)if check Ltemp, A) == 1: ans = temp def check (x, A): unt = 0return ons tor a in A: if (a&x)==x cnt+=1 if cnt = = 4
return ) return O

(31) Excel column number

"AB"  $\Rightarrow$  28 (1)(26) + (2)(26°))

"YZ"  $\Rightarrow$  25 [26) + (26)(1)

| N = len(A)

| ans = 0

| for i in trange(N-1,-1,-1):

| cans + = (ord(A[i])-64)\*(26\*(N-1-i))

| return ans