2 pointer
e. 89 given array, find truplets adding up
Apperoach! Bearte force  try out all the touplets. Tc: 0(n3/15C=0(m))  add them to set
try out all the templets. To: 0 (n3) SC = 0 (m)
- add them to set
logmitime taken for insertionce
Appearach 2 flashing.
2 loops + hashing for third element.
fol(i=0 > n-1) = hach Cacill centratived
Showach & Hashing for third element.  for (i=0 > n-1) = hash [a[i]] ? Senhausted  for (j=i+1 -> n-1) hash [a[j]] ; S  c=-(a+b) = if c enist in hash map
(wadd)
(wadd) butter Tr = 0 (N2 109 m) (2) add the triplet to set
SC > 0 (m)+ 0 (N)
Apperbach 3 2 pts approach
- soed the alifecty - keep a constant and b and c to the fronter - keep a constant and b and c to the fronter - keep love fite just after a and high just at
- beek love her just after a and high just at
the end of workant
> il as [57+ as [c] < as [a], low ++
the end of versay  The end of ve
else Pset, add (al Ca], al Cb], al [c])
1 court things
# ignose duplicate outlinum [it ] ift
TC > O(NXN)
$fc \Rightarrow o(N \times N)$ . $sc \Rightarrow o(M)$ auxiliary: $o(1)$ .
Q JAM TO THE STATE OF THE STATE
The state of the s

- 12-12-1

Q.40. Tropping Rainwater
guen n non-re ent, expeciserds elevations.  not have much water it can teap after evaluing
> find home much water it can teap after
eraining
Apperbach!  Berte force apperbach.  Check condition  min (left (i), sight (i))-a[i]  TC > O(N2)
Bette fordifion
min (left (i), eight (i) - a [i]
$TC \neq O(N^2)$
$SC \rightarrow OCID(a)$
spheroach & (Puefix Sum)
010,210,13,21,2,1
here 0 1 0 2 1 0 1 3 2 1 2 1 here 0 1 0 2 2 2 2 3 3 3 3/3 max (i-1)  of 3 3 3 3 3 3 3 3 2 2 2 1 max (sit)  TC -> D(N) + D(N)+
My 333 3 3 3 3 3 3 2 2 2 2 1 1 MXX (Sit)
TC-20(N) + 0(N)+
and z min (left(i), eigh(i)-a[i] o(N)
ans z min (left(i), sigh(i)-a[i] $O(N)$ $SC \rightarrow O(2n)$
The median transfer to the state of the stat
Apperbach 3. (2 pts. apperbach)
on $l=0$ . ever $=0$ . eviget m $0 \times =0$
ezn-1 lytman =0
y (a[e) < = ale))?
Jarot a [lebtmax]
if(a[e]) = a[leftmax])
olle
ltiest = (leftmar-a[i])
OP A
olse
y a [i] > = ei gt max
oughtnor=a[i]
'else'
416+= (lmar-a[2))

Q41. Remove dupli cates from sorted
array Dolo 1 - 100
spheroach 1 Use hash set  TC > 0 (NLOGN) + 0 (N)  SC => 0 (N)  ANLOGO AND 2 25 1 to abbrever
$SC \Rightarrow O(N)$
Approach 2 & pte approach
while (j <n)< td=""></n)<>
while (i = = j)
tubile a'+1'
a[i] = a[j]
eletum (+1 8C>OCN)
942 Mari consecutive ones
- gueen lemany array, find man consecutive
use 2 vol.
uit 20 max =0
- when find I, ant = 1 and max = max(ant, max)
Ans. max TC > O(n) SC > O(1)