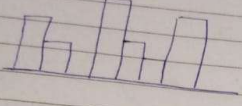


①

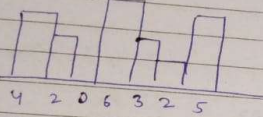
### Trapping Rainwater

Date \_\_\_\_\_



Yai Panna kuch Building hai or Panna in sb ki height given hai.

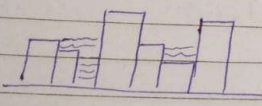
Height: [4, 2, 0, 6, 3, 2, 5]



4 2 0 6 3 2 5

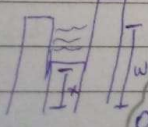
Ab suddh suddenly in blocks ke uper kuch clouds Rajati hai or pani in blocks mai posna shru karega.

In blocks ke andar jitni bhi volume of rain water aye mujhai sawal mai bas uski volume nikalna hai.



Jesai block 2 par kitna pani jama hai or tubal blocks par kitna pani jama (trap) hua hai or har block ki width 1 hai.

Hum is sawal ko auxiliary arrays ki help se solve karai gai.



Is diagram ke through yai batana chahna ho ke block ke surrounding ke is block se bhi baray blocks honge tabhi to pani banhai ga is tyo water height ko w or block ki height ko x kehliya

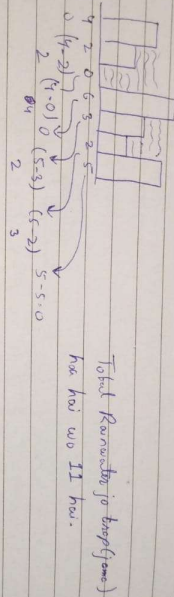
HUZAIFA

$(w-x)$  Xaidith  $\rightarrow$  Itra Pan jana hoga.  
na

$$\downarrow \quad \downarrow$$

$$(\text{water level} - \text{Black Rhyol}) \times \text{width} = \text{trapped water}$$

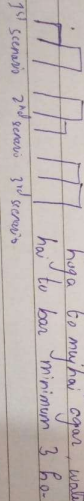
Pygae lobi formula hai through poni ki value - we mai que to 0 large mai.



$$0 + 2 + 4 + 0 + 2 + 3 + 0 = 11$$

o) Kya single bar ki water trop hoge nahi to  $wt=0$

2) Pagar 2 bar hoga



1<sup>st</sup> scenario 2<sup>nd</sup> scenario 3<sup>rd</sup> scenario

2) Agar bole 3 sai zyda Ro lin wo ascending order mai ho tab  
bw pari store nahi ho paise.

same was descending order mai hai  
ho tak hi pari jame nahi hoga

HUZAIFA

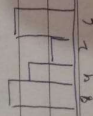
UNIVERSITY

min (max left boundary, max right boundary)

Tread water = (water level - height)

no water level change

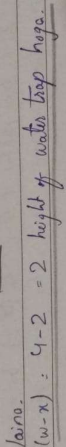
nikalme teat hi ap  
to watershed ke as-ea ilikogae cde mai eai ilikogae  
mai (mex left boundary, max Right boundary) is isma jama hga



qoi bo is case mai water level = 6  
 $(w-x) = 6-2 = 4$

Atb hum 8,6 mai composition karai gai or  
'q chobe hoga wo lai gai. to jo chaba hoga wo

Agora esse cenário é



water level 1000.

mai block hai isko hum pack-ke, valley . Ab iscase mai pon kar-ke  
weight tak jama hoga humne left 8 night ke ~~mai~~ jo chote hoga uthe  
from water level hain 6 or 4 mai minimum kar hai 4 to 4 ho

Agar kuch exai blocks ho

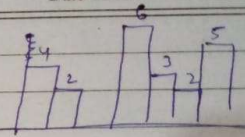


(4)

Date \_\_\_\_\_

left max boundary: [4 | 4 | 4 | 6 | 6 | 6 | 6]

right max boundary: [6 | 6 | 6 | 5 | 5 | 5]



Leftmax 4 se pehlay koi block hai nahi to  $(4,0)$  to men 4 hua or ab agay barho 2, or isay pehlay 4 thay to  $(4,2)$  to max 4 hua is karte hain se value compare karo unka max nikalo.

Right max mai 5 se pehlay koi hai nahi to 5 men hua phir agay 2 aya to  $(5,2)$  mai max 5 hua to 5 or fill bhi right side se karna start karay gay uper wala array mai