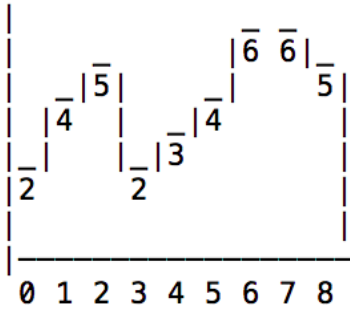


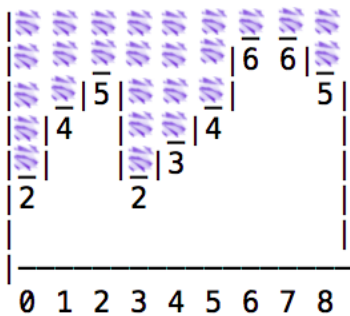
Please complete the below coding challenge and return within 24 hours.
Here are some test cases that should help you to verify/validate your solution.

```
var valley1 = [2, 4, 5, 2, 3, 4, 6, 6, 4, 5]; // 7 units
var valley2 = [9, 8, 7, 6, 5, 5, 6, 7, 8, 9]; // 20 units
var valley3 = [3, 2, 1, 2]; // 1 unit
var valley4 = [5, 4, 3, 2, 1, 5]; // 10 units
var valley5 = [5, 1, 2, 3, 4, 5]; // 10 units
```

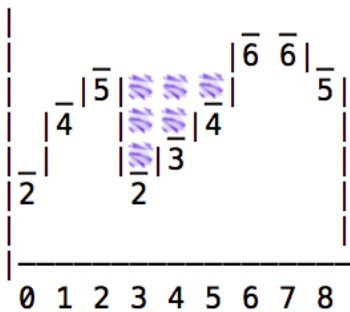
Flooded Valley



The above diagram is a depiction of a valley and would be described by the array [2,4,5,2,3,4,6,6,5].



Imagine there is a flood that completely fills the valley before eventually subsiding. Write a function in JavaScript that takes as input an array of heights for the valley and outputs the volume of liquid that would be trapped in the valley once the flood subsides.



For example, with the above valley the volume of liquid retained would be 6 units once the flood subsides