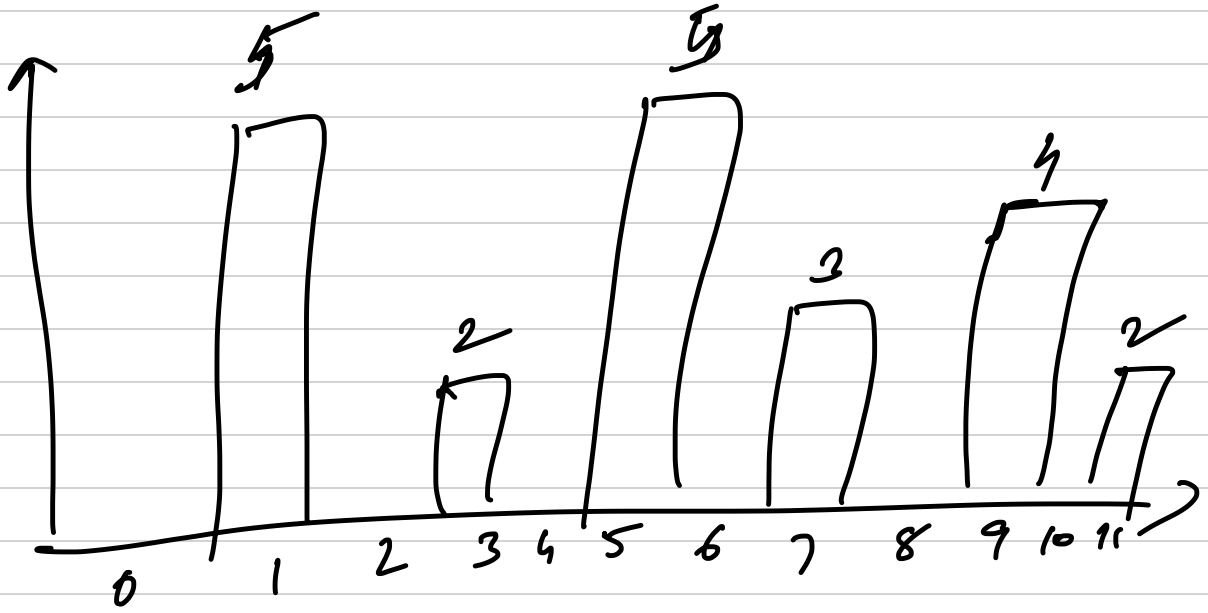
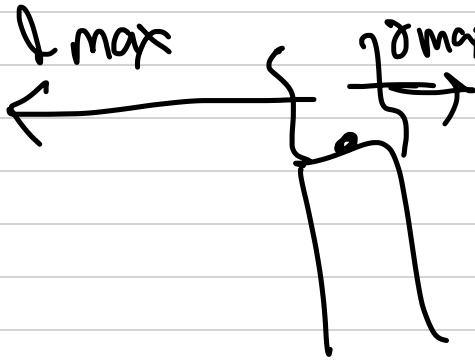
42. Trapping rain water



At each position (x) we will try to calculate how much water can be filled above it



water above a bar will be

$$\min(r_{max}, l_{max})$$

As at any point we can only fill water that can be hold be max of left bars and max of right bars

```
for x in range(1, n):
    if min(l_max, r_max) > nums[x]:
        water += min(l_max, r_max) - nums[x]

return water
```