

LEVEL 2



- Instead of velocities, you are now given a sequence of accelerations of the drone
- The drone always accelerates up, therefore acceleration cannot be negative
- There is a gravity of 10 velocity per tick
- Every tick the drone's velocity will be recalculated by adding the acceleration and subtracting the gravity
- After the velocity is updated, within the same tick the drone's position will be updated based on the drone's new velocity
- The height will never be negative during the flight
- **For each flight calculate the drone's final height**



Example

For the accelerations **15 7 6 13**, the final height is **6**



Tick	Acceleration	Velocity	Height
1	15	5	5
2	7	2	7
3	6	-2	5
4	13	1	6

$velocity_i = velocity_{i-1} + acceleration_i - gravity$
 $height_i = height_{i-1} + velocity_i$



Input

Name	Description	Example
N	Number of drone flights	3 15 7 6 13 11 18 1 14 18 7 2 5
Flight (repeated N times)	A list of integers separated by spaces, each representing the acceleration of the drone tick by tick	

Output

Name	Description	Example
Height (repeated N times)	The final height of the drone	<i>format identical to previous level</i> 6 14 2





Happy 40th Coding Contest

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CONTEST

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Autonomous
Drone

