

Find perimeter()

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Find the perimeter of a bar graph given the heights at each bar.
Assume width of each bar is 1 unit and the heights of each bar is given as integers.

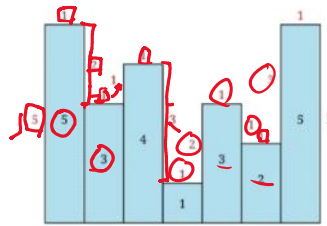
Example

Input

5 3 4 1 3 2 5

Output : 36

Perimeter = $5+1+2+1+1+3+1+2+1+1+3+1+5+5 = 36$



Perimeter = $5+1+2+1+1+3+1+2+1+1+3+1+5+5 = 36$

$$5 + 1 + (5-3) + (4-3) + 1 + (3-1) + 1 + (2-1) + 1 + (5-2) + 1 + 5 = 36$$

Logic → 0 handle

Input → integer → list → iteration
→ perimeter = 0

① → $L[0] + 1$

② → $(L[i] - L[i+1]) \rightarrow \text{add} \rightarrow \text{Perimeter}$ → we reach end of list

③ → $L[-1] + \text{width}(\text{total}) \Rightarrow \text{Perimeter}$