

Q11. Using Paper and Pen, write the Internal Mechanism for sum operation using reduce function on this given list:  $[47, 11, 42, 13]$ ;

(Attach Paper Image for this answer) in collab notebook

Ans. Explanation

The reduce() function from functools works as follows:-

from functools import reduce

reduce(lambda x, y: x+y,  $[47, 11, 42, 13]$ )

step	operation	Result
1	$47+11$	58
2	$58+42$	100
3	$100+13$	113

So, Internally, reduce() works like

$$(((47+11)+42)+13)$$