

* Leetcode 881 - Boats to save people:-

→ Each boat can have at max 2 people whose total weight \leq limit.

* Test cases:-

Input:- $[3, 5, 3, 4, 1, 2]$ limit = 5

Output:- 4 (4 Boats $\rightarrow (5), (4, 1), (3, 2), (3)$)

Input:- people = $[1, 2]$ limit = 3

Output:- 1

* Solution:-

- First sort the people array in ascending order.
- Now the person with smallest weight will be at the beginning & the heaviest person will be at the end.
- Use two pointer approach (start, end) to check if sum of the start & end \leq limit.
 - If yes then increment start & decrement end.
 - Else just put the person at the end in the boat.
- Increment the boat counter.

Time complexity:- $O(n \log n)$

Space complexity:- $O(1)$