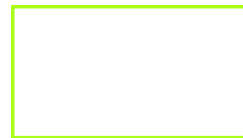


**Question:** capacity to ship package within  $D$  days.

**Explanation:** Lets say we have the following package to be shipped, find the min-weights of the ship so that all packages can be shipped in given days.

weights =  $[2, 4, 6, 2, 3]$  days = 3

based on the days, the shipment of these 5 packages should be completed in 3 days;



Lets start packing **one package** per day.

day-one	2		we can see, in three days, we can ship only 3 boxes. ship more boxes per day.
day-two	4		
day-three	6		

2 4 6 2 3



Let's pick max-weight allowed to be 5; it means at each day more than 5 kg cannot be shipped.

day-one 2

day-two 4

day-three 6

still two packages remains to be shipped;

we can choose two or more consecutive packages, but that cannot exceed the weight limit (5kg), we put earlier

increase the amount of weights: 6kg per day.

day-one 2 4

day-two 6

day-three 2 3

now, we can ship all the packages in three days

How to code it?

weights = (2) (4) (6) (2) (3)



```
pw = 0
max_weight = 6
for i in range(len(weights)):
    if pw > max_weight:
        def = def + 1

    pw = pw + weights[i]
```