

15. 3 Sum

② Sort nums iterate from $[0, \text{len}(\text{nums}) - 2]$

① Find all triplets with $\text{nums}[i]$

- Find $\text{nums}[j]$, $\text{nums}[k]$

i l r

i l r

- Start with 2 indices that define a shrinking window

-10 -9 -6 -4 -3 0 3 6 6 8
l r -2
l r -1
l r 2
l r 0
l r -1
l r 0

- Lower than target $\rightarrow l + 1$

- Greater than target $\rightarrow r - 1$

- Equal to target \rightarrow Skip all dupes 0 0 0 1

l l l
and advance to next index $!= s[l]$

vice versa for r