**Things I learnt during NeetCode**

**Binary Search:**

Code:

low = 1

high = max(array)

while (low<high):

    mid = (low + high) // 2

    if target\_present\_in\_second\_half:

       low = mid + 1 # Mid is not a possibility

    else:

        high = mid # Mid might be a possibility

return low

* Either low or high can be returned because they have converged to the same point.
* If your loop condition is low <= high then you need to set your update parameters in a way that your pointers still converge. That is the way to get out of a binary search loop.
* The invariant must ensure that the correct answer is always within the current range.
* Range must shrink with every iteration.