

* Single Element in a Sorted Array

[1, 1, 2, 2, 3, 4, 4, 5, 5]

binary search.

$$\left. \begin{array}{l} m \% 2 = 0, \quad m \& m+1 \\ m \% 2 = 1, \quad m \& m-1 \end{array} \right\} l = m+1$$

else \rightarrow can be that same element.

$$\therefore x = m$$