

* Elimination Game

→ remove first & then one after other.

← remove last & then one after other

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

→ 2 4 6 8 10 12

← 2 6 10

→ 6

If → or ← element count % 2 = 1, beginning changes.

difference = difference * 2

remain count = remain count / 2

$O(\log n)$