

* Super Ugly Number

2, 7, 13, 19 \rightarrow 12th min value from those primes.

(1, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0)

[0, 0, 0, 0]

2 7 13 19

$\min(2 \times 1, 7 \times 1, 13 \times 1, 19 \times 1)$

(1, 2, 0, 0, 0, 0, 0, 0, 0, 0, 0, 0)

[1, 0, 0, 0]

$\min(2 \times 2, 7 \times 1, 13 \times 1, 19 \times 1)$

(1, 2, 4, 0, 0, 0, 0, 0, 0, 0, 0, 0)

[2, 0, 0, 0]

$\min(2 \times 4, 7 \times 1, 13 \times 1, 19 \times 1)$

(1, 2, 4, 7, 0, 0, 0, 0, 0, 0, 0, 0)

[2, 1, 0, 0]

$\min(2 \times 7, 7 \times 2, 13 \times 1, 19 \times 1)$

(1, 2, 4, 7, 8, 0, 0, 0, 0, 0, 0, 0)

[3, 1, 0, 0]

(1, 2, 4, 7, 8, 13, 14, 16, 19, 26, 28, 32)

can be optimized.

store values waiting for next selection in an array.

If current $\text{val}_i = \text{value}$, then store the next index value as value for next selection.

take min & store relevant value

Can use priority Queue with minHeap

1, 2, 4, 7, 8, 13, 14, 16
 (13) (16) 2x4th position)
 add 13x2 to queue
 add 13x2 to queue