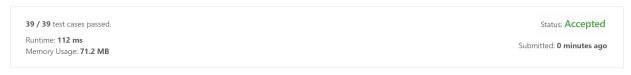
- 1. Let f[y] denote the gcd of all numbers being a multiple of y. When we insert a new number x, update all f[y] where y is a factor of x.  $O(n \cdot \sigma(U) \cdot \log U) = n \cdot 2^{O(\frac{\log U}{\log \log U})}$ .
- 2. We can get gcd x iff the gcd of all a[i]'s being a multiple of x equals to x.  $O(\sum_{i=1}^{U} \frac{U}{i}) = O(U \log U)$ . 3. After computing f[x], we can update  $f[\frac{x}{p_i}]$  for each prime factor  $p_i$  of x.  $O(\sum_i \frac{U}{p_i}) = O(U \log \log U)$ .

## **Number of Different Subsequences GCDs**

## **Submission Detail**



## **Accepted Solutions Runtime Distribution**

