•) Every array after several operations will be in the form
$a = [a_0 + t_0 * value, a_1 + t_1 * value, \dots, a_{n-1} + t_{n-1} * value]$

•) Let $MEX(a) = k$, it mean

! k element in a have distinct value in $[0, k-1]$

⇒ Our problem: Find max k / there are k element in a range from $[0, k-1]$.

⇔ Find k_{max} $\begin{cases} a_{p_0} + t_{p_0} * value = 0 \\ a_{p_1} + t_{p_1} * value = 1 \\ \vdots \\ a_{p_{k-1}} + t_{p_{k-1}} * value = k-1 \end{cases}$

We have: $a + t * value = h$

$\Leftrightarrow a \equiv h \pmod{value}$

⇒ Checking there is any index p / $a_p + t_p * value = h$.

by: check. there is any $a_p \% value = h \% value$.

⇒ sol: counting $a_p \% value$.

```
for i = 0 to n-1
    if cont[i % value] > 0 : exist p / a_p + t_p * va = i
        cont[i % value] -= 1
        Cont
    else return i
return n
```