CodeForces Educational Round 178 E

omeganot

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Since the sum of the number of cards doesn't change, this is only possible when $a + b + c$ is divisible by 3. If so, we can let $d = \frac{a+b+c}{3}$.

How do we know if we can get all decks to be size d? Well, a and b can only increase in size, and c can only decrease in size. If either a or b have more than d cards, it's not possible. It's actually sufficient to check this condition, because if $a \leq d$ and $b \leq d$, $a + b + c = 3d$ gives $c = 3d - a - b = d + d - a + d - b$. Since $d - a \geq 0$ and $d - b \geq 0$, we have enough elements from c to give to a and b. We solve the problem in $O(1)$.