Codforces Round 1003 (Div 4)

C1 → Skibidus & Fanum Tax

↳ Two array a & b are given

↳ we have to make the array increasing in nature

i.e $a_1 \leq a_2 \leq a_3 \leq \ldots \leq a_n$

↳ set $a_i = b_j - a_i$

⇒ $a_i \geq prev$

or

$b_j - a_i \geq prev$ → CRUX of the problem

⇒ $\boxed{b_j \geq a_i + prev}$

In C1 (easy version) b size is 1

hence we will check if

$\boxed{b[0] \geq a_i + prev}$

Remember one more thing suppose we have an array

$a_1, a_2, a_3, \ldots a_n$

Suppose we are at this index then

if → $a_2 > a_1$ && $b[0] - a_2 > a_1$

then choose

$\min(a_1, b[0] - a_2)$

this is because it will be easier for upcoming $a_3, a_4 \ldots a_n$ to make them increasing if we take minimum value of a_2 such that $a_2 > a_1$

In C2 version of this question we sort b array & find minimum element such that

$b_j \geq a_i + prev$

& if no such b exist print "No" else print "YES" at the end.