

Now that Chef has finished baking and frosting his cupcakes, it's time to package them. Chef has N cupcakes, and needs to decide how many cupcakes to place in each package. Each package must contain the same number of cupcakes. Chef will choose an integer A between 1 and N , inclusive, and place exactly A cupcakes into each package. Chef makes as many packages as possible. Chef then gets to eat the remaining cupcakes. Chef enjoys eating cupcakes very much. Help Chef choose the package size A that will let him eat as many cupcakes as possible.

$N=2$ $A=1$ cup: 0
 $A=2$ cup: 0

$N=10$

$A=1$ cupcake: 0
 $A=2$ cupcake: 0
 $A=3$ cupcake: 1
 $A=4$ cupcake: 2
 $A=5$ cupcake: 0
 $A=6$ cupcake: 4
 $A=7$ cupcake: 3



Sample Input 1

2
5

Sample Output 1

2
3

$N=5$

$A=1$ cup: 0
 $A=2$ cup: 1
 $A=3$ cup: 2
 $A=4$ cup: 1
 $A=5$ cup: 0

$N=2$ o/p: 2

$N=5$ o/p: 3

$N - \text{chef ate cupcakes}$
 $(\text{max}) \uparrow$

In the medieval age, there were 3 kingdoms A , B , and C . The army of these kingdom had N_A , N_B and N_C soldiers respectively.

You are given that an army with X soldiers can defeat an army with Y soldiers only if $X > Y$. \rightarrow 2 kingdoms.

An army is said to be **dominant** if it can defeat both the other armies **combined**. For example, kingdom C 's army will be dominant only if $N_C > N_A + N_B$.

Determine whether any of the armies is **dominant** or not.

N_A	N_B	N_C	
15	5	6	YES
12	13	16	NO
1	1	100	YES
10	10	20	NO