

input n	$a \leq n$:	$a = b$	$b = z$	$z = a + b$	output
$a = 0$	$0 \leq 4$	$a = 1$	$b = 0$	$z = 0 + 1$	0
$b = 1$	$1 \leq 4$	$a = 1$	$b = 1$	$z = 0 + 1$	1
$z = 0$	$2 \leq 4$	$a = 1$	$b = 1$	$z = 1 + 1$	1
	$3 \leq 4$	$a = 2$	$b = 2$	$z = 1 + 1$	2
	$4 \leq 4$	$a = 3$	$b = 3$	$z = 2 + 1$	3