

1. You are given an array of positive integers. you want to check whether there is a triplet(a,b,c) such that $a + b = c$

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2. Given a number n & a prime $p(< n)$ consider the binomial coefficient S
 $C(n,0)$, $C(n,1)$, $C(n,2)$, ... , $C(n,n)$ one wants to find out how many coefficients are not divisible by p . (try for a $\log(n)$ algo.)

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3. A chess board ($N \times N$) is given. you want to place knights such that no
 O attack each other & no 2 control the same position.

|--|--|--|--|--|--| | A| | | | | B| |--|--|--|--|--|--| | | | a
 | | *| | | |--|--|--|--|--|--| | | | | | b|
 |--|--|--|--|--|--| in the above grid the 2 knights (position marked

A & a) are attacking each other & the 2 knights (position marked B & b
) control the same position(marked Bp addresses baahar bo chummi
 header iitians mail mankars sendits.sh slocat.sh time xaa xab xac xad
 xae xaf xag xah xai xaj xak xal xam xan); you have to give the maximum
 no. of knights that u can place.

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4. Given a string one wants to find out the shortest even palindrome
 starting from the first index. e.g 1.aabbaa now there are 2 even
 palindromes (starting from the 1st index) aa & aabbaa. thus the answer
 is aa. 2.abb although bb is a palindrome but it doesn't start from 1st
 index thus answer -1.