

<https://www.codespeedy.com/the-two-knights-problem-implemented-in-c/>

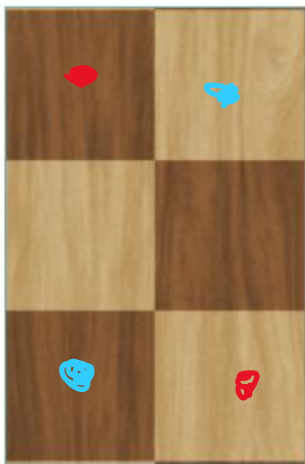
Note that we have to consider both knights as identical and hence not consider the permutation between them,

To calculate number of ways they will not attack, we can do total ways – ways they do attack.

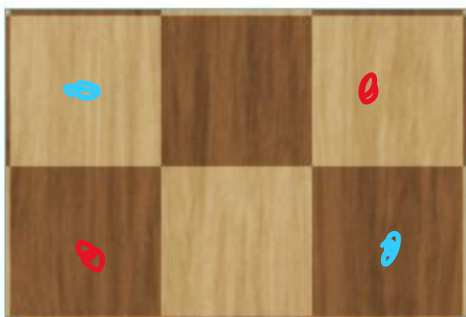
Total ways are just number of ways to place two knights on the board is just $(n*n) C 2$.

$n*n$ is the total number of cells in the board.

When we see how a knight attacks, we can see that L shape mai karta h vo attack to aisa board ban jayega:



In this $2*3$ block, we can see there are 2 ways to place knights such that they attack each other. So if we know how many $2*3$ blocks we can place, 2 times that value would give ways to place knights inside them



Similarly inside this $3*2$ block as well, 2 ways to place knights as required.

Therefore, total ways they can attack is $2*(\text{number of ways to place } 2*3 \text{ block}) + 2*(\text{number of ways to place } 3*2 \text{ block})$

Ab number of ways kitne h iska formula banana ek $4*4$ wala board banake dekhlo samjh aajayega. (its $(n-1)*(n-2)$ for both)