

BACK

Chess Triangle

181,354



< DESCRIPTION

MY SOLUTIONS

LEADERBOARD

COMMENTS

README

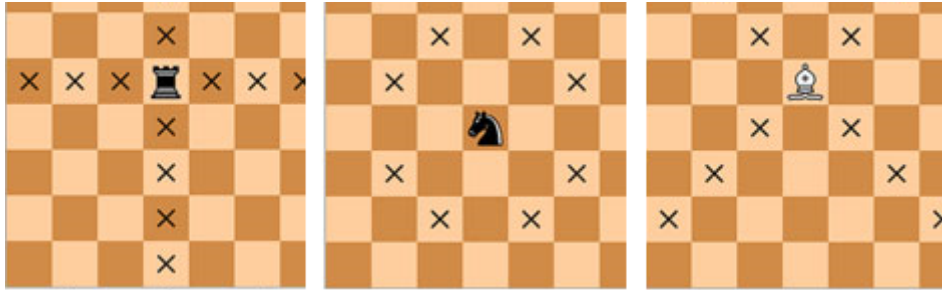


CODEWRITING

SCORE: 300/300

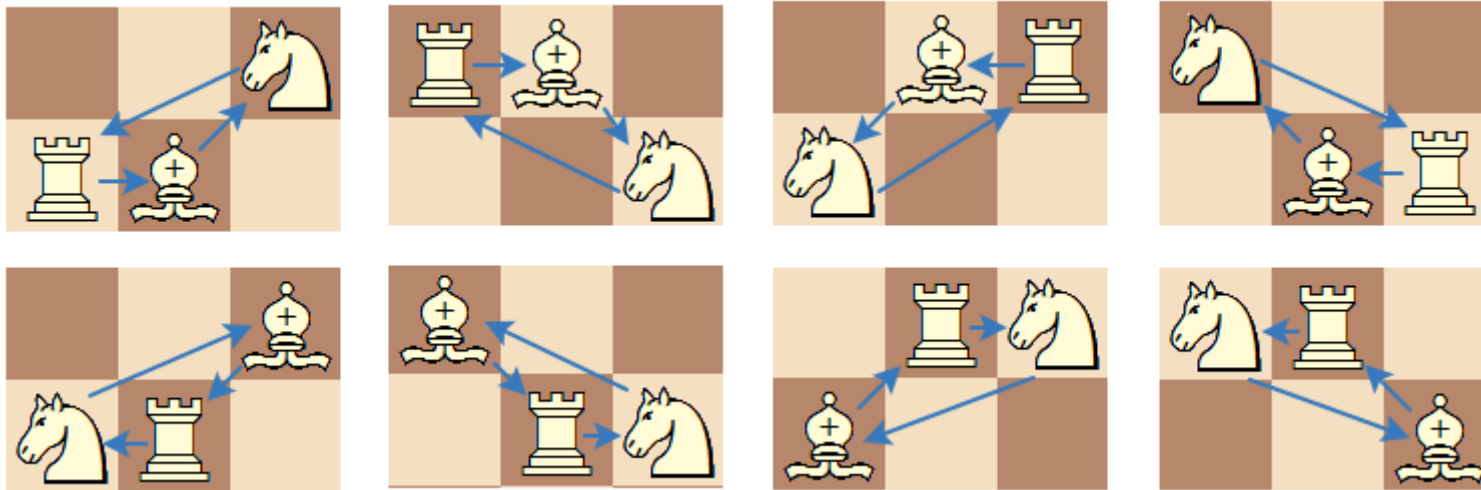
Consider a bishop, a knight and a rook on an $n \times m$ chessboard. They are said to form a *triangle* if each piece attacks exactly one other piece and is attacked by exactly one piece. Calculate the number of ways to choose positions of the pieces to form a *triangle*.

Note that the bishop attacks pieces sharing the common diagonal with it; the rook attacks in horizontal and vertical directions; and, finally, the knight attacks squares which are two squares horizontally and one square vertically, or two squares vertically and one square horizontally away from its position.



Example

For $n = 2$ and $m = 3$, the output should be
`chessTriangle(n, m) = 8`.



Input/Output

- [execution time limit] 4 seconds (js)
- [input] integer n

Guaranteed constraints:

$$1 \leq n \leq 40.$$

- [input] integer m

Guaranteed constraints:

$$1 \leq m \leq 40,$$

$$3 \leq n \cdot m.$$

- [output] integer

[JavaScript (ES6)] Syntax Tips

```
// Prints help message to the console
// Returns a string
function helloWorld(name) {
  console.log("This prints to the console when you Run Tests");
  return "Hello, " + name;
}
```