

knight tour

```
public static void printKnightsTour(int[][] chess, int r, int c, int upcomingMove) {
    if(upcomingMove == chess.length * chess.length) {
        chess[r][c] = upcomingMove;
        displayBoard(chess);
        chess[r][c] = 0;
        return;
    }
    chess[r][c] = upcomingMove;
    for(int i=0; i < 8;i++) {
        int nr = r + dir[i][0];
        int nc = c + dir[i][1];
        if(nr >= 0 && nr < chess.length && nc >= 0 && nc < chess.length && chess[nr][nc] == 0) {
            printKnightsTour(chess,nr,nc,upcomingMove + 1);
        }
    }
    chess[r][c] = 0;
}
```

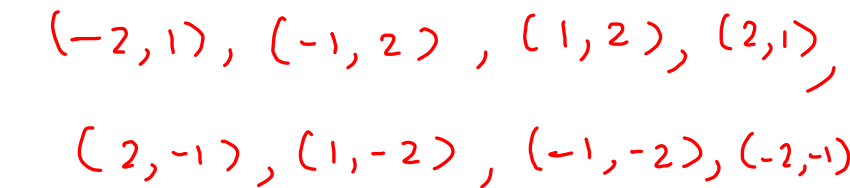
```
25 2 13 8 23
12 7 24 3 14
1 18 15 22 9
6 11 20 17 4
19 16 5 10 21
```

	0	1	2	3	4
0	19	2	13	8	
1	12	7	18	3	14
2	1	20	15	24	9
3	6	11	22	17	4
4	21	16	5	10	23

$N = 5$

$r = 2$

$c = 0$



γ, c

$$n C = C + \text{div}(i)(1)$$