

HAND IN MODULE 2

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1. TASK 1:

Exercise A

The both of us have already played Tetris, so we'll skip this part.

Exercise B

Implementing the function `void Board::reduce()` to remove the lines when completed.

Looping over row number `i`, from top to bottom.

```
void Board::reduce() {  
    for(int i = 3; i < 19; i++) {
```

Defining variables to use while looping over `j` number of columns.

```
        int count = 0;  
        int tilecount = 0;  
        for(int j = 1; j < 11; j++) {  
            if (tiles[j][i] != sf::Color::Black) {  
                count++;
```

If all tiles in the row is set to black, looping upward begins, moving each tile in each row one down.

```
            if(count == 10) {  
                tilecount = i;  
                for(int k = tilecount; k >= 3; k--) {  
                    for(int j = 1; j < 11; j++) {  
                        tiles[j][k] = tiles[j][k-1];  
                    }  
                }  
                break;  
            }  
        }
```

2. TASK 2:

How was this puzzle created? [Puzzling.stackexchange.com](https://puzzling.stackexchange.com) was utilized to get the correct specifications of the puzzle, and inspiration for the statements to be made by the three people in the

encounter.

Knight: Always tells the truth. Knave: Always tells a lie. Spy: Tells either the truth or a lie.

The puzzle involves encountering three different people, person A, B and C.

They all have their own statements:

A: "I am the only knight." B: "Me and A are knights." C: "B is a knave."

Who is the knight, who is the knave, and who is the spy among the three?

Reformulated statements:

A: "B and C are not knights" B: "C is the only one not telling the truth." C: "B is not a knight."

Knight, Knave and Spy			
Combinations A B C	Is it true? A B C	Would it be said? A B C	Solution A B C
0 0 0	AF	AFG	004
0 0 1	AX	ALA	248
0 1 0	AL	ALB	008
0 1 1	DZ	DZA	012
1 0 0	AS	ASM	016
1 0 1	AD	AND	020
1 1 0	AO	AGO	024

3. CODE APPENDIX: