HAND IN MODULE 2

MARIUS HAAKONSEN, OLE K LARSEN

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 row number 'i' is inequal to the color black, the program loops from that row and upwards, setting the current row to be equal to the row above, giving the impression that the rows "falls 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;
            }
```

As a little coding-exercise from out part, we also added the functionality of pressing spacebar to make the shapes move all the way down until it intersects with other shapes. We also added a score.

Legger til noe sjiiit ikke overwrite plz ok, good

2. Task 2:

How was this puzzle created? 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: "C is the knight."
B: "A is the knight."
C: "B is the knave."

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

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 1 x	0 0 0	1 0 x	
1 0 x	0 1 1	0 0 x	
0 x 1	1 0 0	0 x 0	
1 x 1	0 1 0	0 x 1	
x 0 1	1 0 1	x 1 1	1
x 1 0	0 0 0	x 0 0	

Reformulated statements, giving the same answer:

A: "C may tell the truth."
B: "C is not a knight."
C: "B may tell a lie."

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 1 x	1 1 0	0 1 x	
1 0 x	1 1 1	1 0 x	
0 x 1	1 0 1	0 x 1	
1 x 1	0 1 1	0 x 0	
x 0 1	1 0 1	x 1 1	1
x 1 0	0 1 0	x 1 0	

3. Code Appendix: