

15-PUZZLE

The 15-puzzle is a puzzle game that consists of a board with numbered squared sliding tiles. The objective of the game is to place all the tiles in order. (**Figure 1**)

1. Players

- This is a 1-player game.

2. Board and tiles

- There is a squared board (4x4) that allows to place the tiles and slide them.
- There are 15 squared tiles.
- The tiles are numbered from 1 to 15.
- The tiles can slide vertically and horizontally.
- The only way of changing the tiles' position is sliding them using the empty space.

3. Playing the game

- The game can be played using android devices.
- The initial state of the board has all the tiles in order (**Figure 1**).
- The player disarranges the board by sliding the tiles as many times as wished.
- The player indicates when he/she finishes disarranging the board.
- The machine finds a sliding-sequence solution for the un arranged board (**Figure 2**).
- The sliding-sequence is played automatically by the game. The player only watches.
- When the puzzle is solved (all tiles are in order), the player can restart the game.

4. Attention

- Some board positions are impossible. (**Figure 3**).

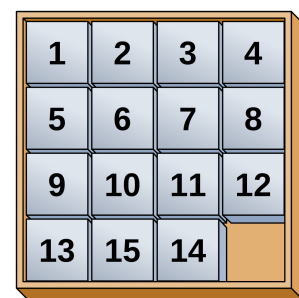
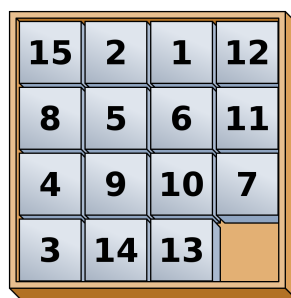


Figure 1. Solved puzzle. **Figure 2.** Unsolved puzzle. **Figure 3.** Impossible position.

