

Port parking of size  $Y \times X$  is filled (in a random way) with blue and red cars in the  $(Y - 1) : 1$  proportion.

The ship will take all the cars from the car park, placing them on  $X$  decks, each of which has  $Y$  cars. Insurance company has a requirement, that a red car has to be placed in the last position on each deck.

It was decided that the cars will be loaded row by row. Therefore the first will be loaded the car in the first row and the first column, the second will load the car in the first row and the second column, and so on.

Create an application - a game that will show the current distribution of vehicles in the parking lot. With the mouse you can indicate which of the two adjacent cars should be swapped, to be loaded in order that will take into account both the ship's parameters and the insurer's requirements. Every swap of cars is counted and the sum of exchanges made is shown in the dedicated component. Each replacement occurs immediately after selecting the pair. Pressing the B button results in the last selected element being withdrawn.

The application interface will present:

- in the upper part of the window, the ship and its parameters;
- in the central part of the window, the arrangement of cars in the parking lot;
- in the upper right corner of the central part of the window, the counter for the number of exchanges made;
- in the left part of the window - results table: the player's nickname and the number of points scored;
- in the bottom part of the window, place the button ending the given stage of the game;

The end of the level will show a dialog asking the user to enter his name. The score obtained will be placed in the score table if the number of points scored is lower than the results obtained by the previous 10 players.