

Exercises

In the following exercises, you have to use matrices. Remember to use functions also!

- Create a store inventory management application. Use a matrix to keep track of products, their prices and quantities. Users can add new products (if there is enough room), update quantities and check the disponibility.
- Create a cipher that changes letters to numbers and numbers to letters ("a" becomes "1" , "3" becomes "c" , and so on). The user enters a text that will be automatically converted in the encrypted message.
- Use matrices to create your personal version of Tic-Tac-Toe! You should be able to play with a classmate. The program automatically checks the winning conditions after each turn. (Is it easier than using just arrays?)
- Use matrices to realize your own version of the Battleship game. You should be able to play with a classmate. By turn each player chooses where to put his ships and then tries to find the opponent ones. The program also declares the winner.