# S T E P COMPUTER AGADEMY

## Practice

# Course: Introduction to Programming Using Python

### Module 12. Design Patterns. Part 2

#### Task 1

Create a class that performs the following operations on an array: display data in a file or on the screen, flip data, find maximum and minimum. The class can get a set of values from a keyboard or a file. Use the Strategy pattern and other necessary patterns.

#### Task 2

Implement an Adapter pattern. Test the work of the created class.

#### Task 3

Implement a Facade pattern. Test the work of the created class.

#### Task 4

Every educational institution has students. Students are a part of groups. Simulate a teaching and learning process. The app should allow you to add, delete, and edit information about students and groups. Use the Iterator pattern (to display students in the group) and other necessary patterns.