1. Task – recursive data structures

In the Java programming language, write a method that lists all the elements of the list in reverse order

1. Task – Recursion

Write a method that counts the numbers of all elements that are multiples of the number 2 and not the number 4, or have at least one digit 2. The numbers are limited to 1 and 10000. The method receives an integer field as a parameter and returns the number of these numbers as an integer.

Array: 14, 210, 360, 41, 57, 6, 121

Result: 4

1. A geometric image can be composed of simple signs.

Write a method that draws a special square. The method receives an integer number as a parameter. The method returns no result. The number represents the length of a side a. The method should draw a square consisting of numbers I to (a + i)MOD a, the numbers are written in a line as shown by the example for a = 7:

1234567

2345671

3456712

4567123

5671234

6712345

7123456

1. Task – OOP

Programmer Jure has been given a new task. He planted plants in the garden in front of the house, Jure is supposed to code an information system for keeping records of these plants.

a)Write an abstract class Plant that describes plants in general (2 properties and 1 method)

b)Extend the Plant class to the new Basilica class , which should have 1 new property with appropriate getters and setters! This class is not abstract!

c)Use all appropriate classes in special Laboratory class!