## **SOLID Principles Homework Content**

**Homework.Java-3.1.** Scrieti o clasa pentru rezolvarea ecuatiei de gradul I. Salvati solutia in format JSON. Faceti re-design la solutie.

**Homework.Java-3.2.** Refactor Exemplul 2. 1 Sum the areas of various shapes in such a way that a method should compute the areas sum.

**Homework.Java-3.3.** Based on Figure 3 Recommended solution for MultifunctionaPrinter, implement a class for a printer and a fully functional printer. Use all the implemented methods.

**Homework.Java-3.4.** Adapt the above code from Exemplul 2. 2 User creates his own coffee Machines and make it run.

**Homework.Java-3.5.** Adapt the above code from Exemplul 2. 3 User uses some Coffee Machines, delivered (injected) from outside world and make it run

**Homework.Java-3.6.** Adapt the above code from Exemplul 2. 3 User uses some Coffee Machines, delivered (injected) from outside world so coffee machines should be injected via public methods.

**Homework.Java-3.7.** Use SOLID principles to draw a shape.

**Homework.Java-3.8.** Define a Shape interface. Extend it to Circle, Square and Rectangle. Use SOLID principles to compute the area of couple of different Shape instances.

**Homework.Java-3.9.** (Opțional) Re-design Homework.Java-3.1 pentru a putea fi utilizată ca un end-point într-un REST API.