General Introduction

The task involves creating a system to manage an organization called "School," which maintains a list of teachers. The School class needs to implement the LegalEntity interface provided in the package finalexam.task4. Additionally, the School class should include methods for managing the list of teachers and handling file input/output operations.

Class Descriptions

1. LegalEntity Interface

Package: finalexam.task4

Functionality and Goal: The LegalEntity interface defines two methods: getAddress() and getVatNumber(). Any class implementing this interface must provide concrete implementations for these methods. The goal of this interface is to standardize the way address and VAT number information is retrieved from legal entities.

2. Teacher Class

Package: finalexam.task4

Functionality and Goal: The Teacher class represents a teacher with attributes for name, surname, and employee ID. It implements the Serializable interface to allow instances to be serialized and deserialized, which is useful for file I/O operations.

3. School Class

Package: finalexam.task4

Functionality and Goal: The School class implements the LegalEntity interface and provides methods to manage a list of teachers (staff). It includes methods to add, delete, save, and load teachers from a file. This class centralizes the management of teacher data and ensures it can be persisted and retrieved as needed.

4. FactoryTester Class

Package: finalexam.task4

Functionality and Goal: The FactoryTester class is a simple test class to demonstrate the usage of the School class. It adds teachers to the school, saves the list to a file, clears the list, and then reloads the list from the file, displaying the results at each step.