Final exam, task 6

The construction company class is imitating a construction company : it uses various materials and manages it. The code allows for adding, saving, deleting and loading of these materials, it also implements an interface for legal entity details.

The Material class represents a type of material used in construction. It includes attributes such as name, quantity, and price. It also has methods such as Constructors, which provides both default and parameterized constructors for initializing material objects.

Getters and Setters, which allows access to and modification of material attributes.

 equals and hashcode: Overrides these methods for proper comparison based on material name.

toString: Provides a formatted string representation of the material object.

The ConstructionCompany class manages a collection of materials used by the construction company. It implements the LegalEntity interface to provide address and VAT number details. Functionalities of the ConstructionCompany class includes attributes such as:

- Materials: A list that holds instances of Material representing the materials managed by the company.
- address: Represents the address of the construction company.
- vatNumber: Represents the VAT number of the construction company.

And methods, like:

- addMaterial(Material m): Adds a new material to the list of materials, ensuring no duplicates are added.
- deleteMaterial(Material m): Deletes a specified material from the list of materials.
- getMaterials(): Returns a copy of the list of materials.
- saveToFile(String filename): Saves the current list of materials to a file specified by filename.
- loadFromFile(String filename): Loads the list of materials from a file specified by filename.
- Interface Implementation: Implements methods getAddress() and getVatNumber() from the LegalEntity interface to provide company details.

The CompanyTester class serves as a tester for the functionalities in the ConstructionCompany class. It shows the usage of methods to manage materials. Key functionalities include:

- **Methods**:
  - main(String[] args): Contains sample code to create a ConstructionCompany instance, add materials, manipulate the materials list, save/load materials to/from file, and print results to the console.
  - printMaterials(List<Material> materials): Utility method to print the list of materials in a formatted manner.