

# Object-oriented programming – Java

## Abstract

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### Exercise 1.

Create an abstract class `Document` that contains the following fields: `city`, `contractor1`, `contractor2`, `signDate` (text: dd-mm-yyyy), `isSigned` (logical).

Constructor sets the new document ready to be signed according to the values passed in the parameters.

The class contains the following public methods:

- `displayContractors` – displays both contractors information
- `displayBasicDocumentInfo` – displays basic information about the document (`city`, `contractor1`, `contractor2`, `signDate`, if is Signed)
- `displayDocumentDetails` – (abstract) displays all document information
- `returnDocumentType` – (abstract) return text informing about the document type, e.g. invoice, contract of employment etc.
- `sign` – (abstract) performs the signing of the document and displays appropriate message

Then, create a class `Invoice` that extends `Document` class. The `Invoice` class contains fields: `invoiceNumber`, `goodsValue` and public get methods.

Then, create a class `ContractOfEmployment` that contains fields: `salary`, `startDate`, `endDate` as well as public get methods.

Add at least one additional class that extends `Document` class.

### Exercise 2.

Modify the exercise 1 from the previous laboratory. Make the `Worker` class to be abstract. Modify methods and create abstract methods where it is desirable.