

Exercise: Method equals

Create a module and copy classes `MyDate`, `Clock`, `Name` and `Address` into this module.

- Update all classes, adding an `equals` method in each of the four classes. *Note that class `Address` both has instance variables of primitive types and of class types (strings).*
- Create a test class with a `main` method and test all `equals` methods.

Exercise: Method equals in class Person

Copy class `Person` into the module from the previous exercise.

- Update class `Person`, adding an `equals` method. Note that you need to make if-statements too because the `name` instance variable could be `null` (in this case both this and the argument's `name` instance variables have to be `null` in order to be equal). Something like the following:

```
if (this.name != null)
{
    return ... && this.name.equals(other.name);
}
else
{
    return ... && other.name == null;
}
```

- Update the class with a `main` method and test the `equals` methods both for persons having a name and for persons not having a name.

Exercise: Method copy

Update the previous exercise doing the following.

- Update classes `MyDate` and `Clock`, adding a `copy` method in both classes.
- Modify the test class such that you also test your `copy` methods.

(Extra Exercise: Method equals)

Update the previous exercise copying classes `Engine`, `DriversLicense` and `Colour` into this module.

- Update all classes, adding an `equals` method in each class.
- Create a test class with a `main` method and test all `equals` methods.