Programming

week 2 - reflection

You are allowed to use internet resources but you're not allowed to see other participants' code.
The evaluation has a duration of 1 hour and a total of 2 points.

Exercise 1 (1 point)

Derek wants to send a letter to Matilda.
Develop the code that he uses in order to stamp the letter at the post office and send it.
Follow the instructions below:
- You need the following classes: *Letter, PostOfficeAssistant* and *PostOfficeApplication*.
- The *Letter* has an *address* and also a boolean that states if it is *stamped*. It has a *getAddress* method. It also has a *isStamped* method that returns whether the letter has been stamped. It also has a *stamp* method that sets the *stamped* attribute to true.
- The *PostOfficeAssistant* has no attributes. It has the *stamp* method that receives a *letter* and uses its *stamp* method. It also has the *send* method that receives a letter, if it is stamped it says they will send it to the address it says in the letter; if it is not stamped it says they need to stamp it first.
- In the *PostOfficeApplication* class *main* method, create a *Letter* and a *PostOfficeAssistant*, and use it to *stamp* the letter and then *send* it.

Hints:
- ➢ *Keep the address simple. It should be just one String.*
- ➢ *The stamped attribute is a Boolean. Remember to initialize it to false.*
- ➢ *Keep it simple stupid. Don't overdo things, just stick to what the exercise asks for.*

Exercise 2 (1 point)

Later on, a postman picks the letters for that day and he delivers them.
Develop the code that the postman uses in order to deliver one letter and say he delivered it to its address.
Follow the instructions below:
- Reuse the *Letter* from exercise 1 (don't copy it, reuse the existing one from the package where it already is).
- Reuse the *PostOfficeApplication* from exercise 1 (don't copy it, reuse the existing one from the package where it already is).
- Create the class *Postman* that has a list of *Letter*. It has the *deliver* method that goes through all the *letters* he has and one by one, says that he delivered it to its address and removes it from his list (until there are no more *letters* left).
- In the *PostOfficeApplication* class *main* method, create three letters and a *Postman* with them, and use it to *deliver* all the letters.

Hints:
- ➢ *Keep it simple stupid. Don't overdo things, just stick to what the exercise asks for.*