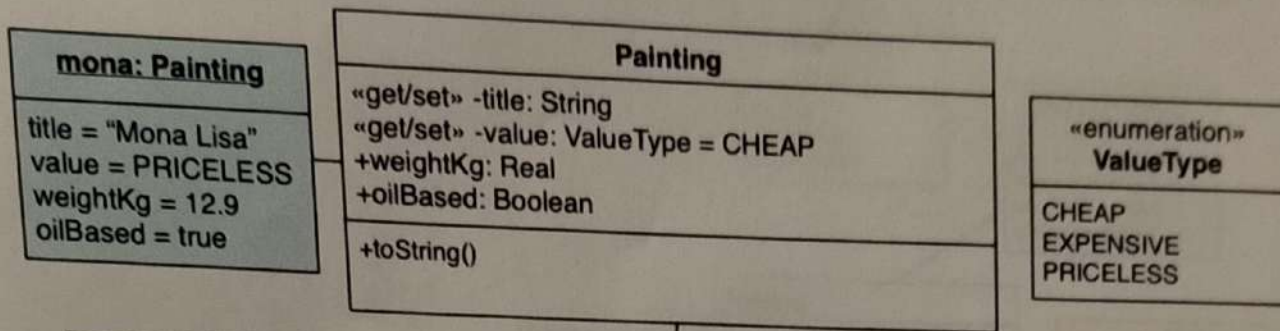


## Question 1: Objects, enumeration & objects

Submit your answers to this question in folder: **question1/**

Total: 30 marks



**Note**  
`toString()` to return a String in the form:  
"**Painting = <title> (<oilString>, <weight>kg, <value>)**"  
If `oilBased` is true then `oilString` is "oil-based", otherwise "not an oil painting"  
e.g.  
"**Painting = Mona Lisa (oil-based, weight 12.9kg, PRICELESS)**"

1a. Write Java files to implement the classes in the diagram above.

1b. Write a `main(...)` method in class **Main** to do the following:

- create and print out the details of the object(s) in the diagram.

Your program output should look as follows:

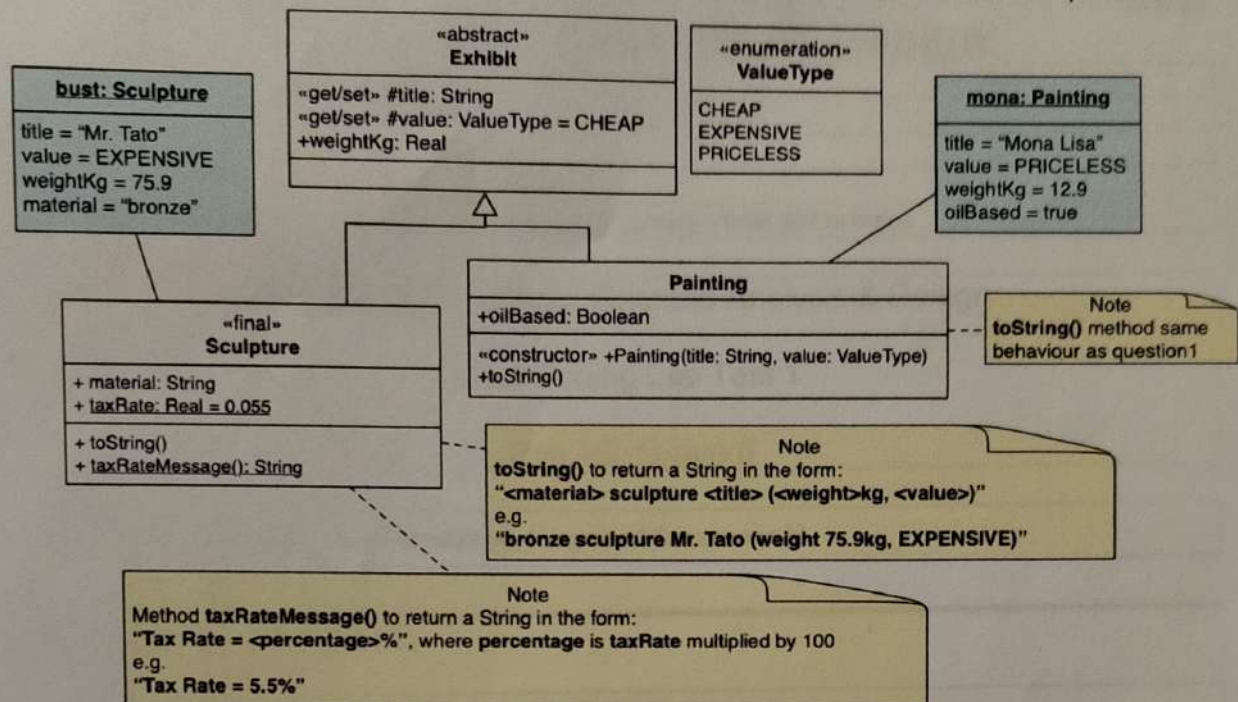
```
$ java Main
```

```
Painting = Mona Lisa (oil-based, weight 12.9kg, PRICELESS)
```

## Question 2: Inheritance, protected & static

Total: 70 marks

Copy your question 1 folder, naming the copy: **question2/**. Adapt your code to answer this question.



2a. Write Java files to implement the classes in the diagram above.

2b. Write a `main(...)` method in class `Main` to do the following:

- Create the `Painting` object from the diagram, and print out its details
- Create the `Sculpture` object from the diagram, and print out its details
- Print out the value returned from `Sculpture` method `taxRateMessage()`
- Change the value of `taxRate` to 0.1
- Print out the value returned from `Sculpture` method `taxRateMessage()`

Your program output should look as follows:

```
$ java Main

Painting = Mona Lisa (oil-based, weight 12.9kg, PRICELESS)

bronze sculpture Mr. Tato (weight 75.9kg, EXPENSIVE)

Tax Rate = 5.5%

Tax Rate = 10%
```