**Serie 1**

1 Theory

1. It allows for
   1. Easier development of complex software.
   2. Easier reuse of existing programs (libraries)
   3. Easier software maintenance
   4. Easier adaptation or extension of software
2. It’s a compilation unit that determines the attributes of objects that it instantiate.
3. An object is an instance of a class. It is determined by its attributes that reflect its state and behavior.
4. An attribute visibility defines whether this attribute can be accessed from outside the class or not.
5. Yes. They can be accessed through public methods.
6. No.
7. No.
8. To create an object, we use: new ClassName(arg1, arg2, …)
9. An object is automatically destroyed by the garbage collector in Java.
10. The garbage collector periodically clears the memory of any inaccessible objects and reorganize it.

3 Debugging

1. Error:(5, 19) java: Car(java.lang.String) has private access in series.series\_1.examples.Car  
   The class constructor is set to private, we cannot use it outside the class itself.  
   Error:(6, 31) java: model has private access in series.series\_1.examples.Car  
   Same as above, the field ‘model’ is set to private, so it cannot be accessed from outside the class
2. 1. We can set the ‘Car’ constructor to public so it can be accessed from outside the class.  
   2. We can create a new public method called ‘getModel()’ that returns the model of the car.