

Part2:

Guitar
<ul style="list-style-type: none">- serialNumber : String- price : double- builder : String- model : String- backWood : String- toWood: String
+ createSound() : void

Inventory
<ul style="list-style-type: none">- guitar() : List<Guitar>
+ addGuitar(guitar: Guitar) : void
+ searchBySerialNumber(serialNumber : String) : Guitar

Part4:

- What is stored in the static heap, stack, dynamic heap?
 - In static heap, class object and class variables are stored
 - In dynamic heap, the object are store.
 - In stack, the methods call local variables and object reference are stored.
- What are objects in the program?
 - The object in the program is obj1 and obj 2.
- What is the state of obj1, obj2?
 - The state of obj1 is empty values for all fields
 - The state of obj 2 is the value assigned during its constructor.
- Do you access all fields of obj1 in the class Tester.java? Why?
 - No because obj1 fields are private and we can access all field of obj1 in its class.
- What is the current object when the program runs to the line "obj2.createSound();"?
 - Obj2.
- In the method main, can you use the keyword "this" to access all fields of obj2? Why?
 - No, because main is a static method and main is a Tester class not in Guitar class.