Ex2:

Class: Guitar

+ Field: serialNumber, price, builder, model, backWood, topWood.

+ Method: createSound

Class: Inventory

+ Field: list of guitars

+ Method: addGuitar searchSerialNumber

|  |
| --- |
| Guitar |
| -serialNumber: string  -price : int  -builder: string  -model: string  -backWood: string  -topWood: string |
| +createSound():void |

|  |
| --- |
| Inventory |
| -guitars: array<guitars> |
| -addGuitar (guitar: Guitar):void  -searchSerialNumber (serialNumber: string): guitar |

Ex4:

**- What is stored in the static heap, stack, dynamic heap?**

Static heap: the class objects and static variables are stored

Stack: the methods calls, local variables and object references are stored

Dynamic heap: the objects are stored

**- What are objects in the program?**

The objects are obj1 and obj2

**- What is the state of obj1, obj2?**

Obj1: fields values are empty

Obj2: fields values are assigned during its constructor

**- Do you access all fields of obj1 in the class Tester.java? Why?**

No, because obj1’s field are private and we can only ancess obj1’s field through it 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 static method and main is in Tester class, not Guitar class