Part 2:

Guitar
serialNumber: String
price: int
builder: String
model: String
backWood: String
topWood: String
createSound: void

Inventory
guitars: List<Guitar>
addNewGuitar(newGuitar: Guitar): void searchBySerialNumber(serialNumber: String): void

Part 4:

1. What is stored in the static heap, stack, dynamic heap?
- The static heap: the class object, the static variables
- The stack: the methods call, the object references, the local variables
- The dynamic heap: the objects created by "new" operator.

2. What are objects in the program?
- They are obj1 and obj2.

3. What is the state of obj1, obj2?
- The state of obj1 is empty value for all fields.
- The state of obj2 is assigned value for all fields via contructor

4. Do you access all fields of obj1 in the class Tester.java? Why?
- No, you don't because obj1's fields are private and cannot be accessed outside the class.

5. What is the current object when the program runs to the line "obj2.createSound();"?
- It's obj2

6. In the method main, can you use the keyword "this" to access all fields of obj2? Why?
- No, you cant because the main method is static and it's not in Guitar class.