

Q1. Choose Answer1 or Answer2 for each question below. For some questions that you are not sure, make a guess! 😊

Question		Answer1	Answer2
1	A class is the _____ of the blueprint for an object. An object is a specific _____ of a class.	implementation, instance	instance, implementation
2	A Person object contains a name and a gender. The name and gender are _____ of the Person class.	methods	instance fields
3	The new operator creates an object and returns _____.	the object	a reference to it
4	A constructor cannot have any return type, even _____.	void	public
5	An object type variable stores the _____ of an object.	reference	data values
6	Suppose we create a Person object as: Person p = new Person(); Later when we set p to null, and there's no other reference referring to the Person object, then the created object is eligible for _____ (reclaim heap memory space).	reborn	garbage collection
7	If an object has no references pointing to it, a program _____ use it. Java performs automatic _____ by periodically reclaiming the _____ occupied by these objects.	may still, memory space recover, garbage	cannot, garbage collection, memory space
8	The _____ reference always refers to the currently executing object.	this	class
9	When several references refer to the same object, these references ____.	cause run-time error	are aliases of each other
10	Suppose p1 and p2 are references, p1==p2 returns true if _____.	they are aliases of each other	the objects referred by them contain the same data
11	The 'equals' method are often re-defined to determine _____.	equality between the addresses of 2 objects	equality between data of 2 objects
12	All Java classes are derived, directly or indirectly, from the _____ class, which is the root of the Java class hierarchy.	java.lang.Object	java.lang.null
13	The _____ and _____ methods are defined in the Object class and therefore are inherited by every class in every Java Program.	constructor, new	toString, equals
14	Given a class, if it contains abstract method(s), then the class must be declared as _____. It _____ be used to create objects instances.	an abstract class, cannot	an interface, can

Q2. Choose your answers for the following and Explain.

- To compare the contents of 2 strings, we can use `==` / `.equals` (Topic02 P9)
- Given `int[] arr = new int[3];`  
If we write: `arr.length=2;`, we get an error: The `final/static` field `array.length` cannot be assigned (Topic03 P12)
- Static methods can / cannot access non-static instance fields like `this.value` (Topic03 P13)
- In Java, we can write a swap method with 2 object parameters which swaps the fields of the two objects / the two objects (Topic03 P14)

Q3. [Lab02-Q6 Print out a multiplication table with a frame] How to solve?

Sample rundown:

```
Input the width of the multiplication table (2-10): 6
Input the height of the multiplication table (2-10): 4
/-----\
|  1 |  2  3  4  5  6 |
|-----|
|  2 |  4  6  8 10 12 |
|  3 |  6  9 12 15 18 |
|  4 |  8 12 16 20 24 |
\-----/
```