Assessment

LATEST SUBMISSION GRADE

100%

1. What does **Car** represent in the following code? **1 / 1 point**

   Car myCar;

   - ○ The class of myCar.
   - ◉ The type of myCar.

   ✓ **Correct**
   Yes.

2. In the following code, **SportsCar** represents _____. **1 / 1 point**

   Car myCar = new **SportsCar**(...);

   - ○ The type of myCar.
   - ◉ The class of myCar
   - ○ The initial class of myCar

   ✓ **Correct**
   Yes.

3. True or false: Individual objects start with the same methods as defined by their class, but after that, individual objects can have new or modified methods given to them. **1 / 1 point**

   - ○ True.
   - ◉ False

   ✓ **Correct**
   Correct. Java classes receive their methods from their class.

4. To create a new object of class C, we would do: **1 / 1 point**

   - ◉ C c = new C();
   - ○ C c = Object.makeObject(C);
   - ○ C c = Object.create(C.class)
   - ○ C c = C();

   ✓ **Correct**
   Correct

5. **What is returned from the following code?** **1 / 1 point**

```
public Car myfunc() {
 Car c;
 return c;
}
```

- (•) Nothing. The Java compiler flags this code as invalid.
- ( ) A null value.
- ( ) A default Car. But it is on the stack, leading to runtime corruption later.
- ( ) Nothing. The method causes a runtime error because there is no Car to return.

✓ **Correct**
Correct. Stack variables such as c are not implicitly initialized, and so c is undefined when we attempt to return it, and the compiler refuses to compile the code.

6. Creating an object is a two-step process. What is the first step? **1 / 1 point**

- ( ) Associates the reference with an object.
- ( ) Identifies constructors and types.
- (•) Creates a reference for an object but doesn't assign it to an instance.

✓ **Correct**
Right.

7. True or False: Java uses a reference table within the JRE to keep track of objects it has constructed. **1 / 1 point**

- (•) True
- ( ) False

✓ **Correct**
Yes.

8. Any attribute with an accessibility set to _____ will not be accessible using Java's "dot" (.) notation outside of that class. **1 / 1 point**

- ○ default
- ○ public
- ◉ private

✓ **Correct**
Yes, this makes it accessible only to the class in which it is defined.

9. To work with an object, you must first _____ the object, then manipulate the object via its methods. **1 / 1 point**

- ○ define
- ◉ instantiate
- ○ store

✓ **Correct**
Right.

10. True or False: All objects of the same data type share the methods in memory as well as data. **1 / 1 point**

- ○ True
- ◉ False

✓ **Correct**
Right!