

Assignment 2

1. Why we need packages in java?

We use packages to avoid name conflicts, and to write a better maintainable code.

2. What is the default imported package?

Java compiler imports java.lang package internally by default.

3. What is Class? What is Object?

A class is a user defined blueprint or prototype from which objects are created.

It is a basic unit of Object-Oriented Programming and represents the real life entities.

4. Why we need constructor?

We need constructor to initialize objects.

5. What is the default value of local variable? What is the default value of instance variable?

No default value for local variables.

Instance variables:

For number, the default value is 0.

For Boolean is false.

For object is null.

6. What is garbage collection?

Garbage Collection tracks each and every object available in the JVM heap space and removes unused ones.

7. The protected data can be accessed by subclasses or same package. True or false?

True

8. What is immutable class?

It means that once an object is created, we cannot change its content.

9. What's the difference between "==" and equals method?

== is a reference comparison, i.e. both objects point to the same memory location

equals() evaluates to the comparison of values in the objects

10. What is wrapper class?

Wrapper classes provide a way to use primitive data types (int, boolean, etc..) as objects.

11. What is autoboxing?

Autoboxing is the automatic conversion that the Java compiler makes between the primitive types and their corresponding object wrapper classes. For example, converting an int to an Integer, a double to a Double, and so on. If the conversion goes the other way, this is called unboxing.

12. StringBuilder is threadsafe but slower than StringBuffer, true or false?

False

13. Constructor can be inherited, true or false?

False

14. How to call a super class's constructor?

Using the special keyword `super()` and passing appropriate parameters at the first line of a subclass constructor.

15. Which class is the super class of all classes?

The class named Object is the super class of every class in Java.

16. Create a program to count how many files/folders are there inside one folder.

Check the github:

https://github.com/david820505/Java5_6Batch/tree/master/src/main/java/day2