

Assignment 2

1. Why we need packages in java? *They help to avoid name conflicts and to write better maintainable code.*
2. What is the default imported package? *Java.lang package*
3. What is Class? What is Object? *Class is reserved keyword used to create custom classes and objects are instance variables created from class.*
4. Why we need constructor? *To initialize the newly created object before its being used.*
5. What is the default value of local variable? What is the default value of instance variable? *There is no default value for local variable and null is default value for reference variable.*
6. What is garbage collection? *Refers to process where JVM collects un-referenced objects.*
7. The protected data can be accessed by subclasses or same package. True or false? *True*
8. What is immutable class? *Class whose content cannot be changed once created.*
9. What's the difference between "==" and equals method? *Equals method compares the hash code and content of two objects being checked whereas '==' compares the address of the objects being checked.*
10. What is wrapper class? *Is a class that provides a way to use the primitive data types as objects.*
11. What is autoboxing? *Is automatic conversion that compiler makes from primitive types to their respective wrapper class objects.*
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? *By using super keyword in the constructor of child class.*
15. Which class is the super class of all classes? *Java.lang.Object*
16. Create a program to count how many files/folders are there inside one folder.
 - the count method should take a parameter called Criteria like this: count(Criteria criteria){}
 - For Criteria class, multiple conditions should be included such as: folder path, includeSubFolder or not, the extension of the file be counted and so on.
 - Optional: Take the input from keyboard.
 - Take care of the invalid inputs. Exception handling.
 - Get proper result displayed.
"There are XXX file(s) and XXX folder(s) inside folder XXX with extension XXX." or something user friendly.

Solution to question 16 in: <https://github.com/gkiprono/assignment2.git>