Java Terminology Explanation

1. Class:

A class is a blueprint or template for creating objects. It defines the properties (attributes) and behaviors (methods) that the objects created from the class can have.

2. Object-Oriented:

Java is an object-oriented programming (OOP) language, meaning it is centered around the concept of objects.

3. Object:

An object is an instance of a class. It is the actual entity that holds values for the properties defined in the class and can perform actions defined by the methods of the class.

4. Instance:

An instance is a specific realization of any object. When you create an object from a class, you are creating an instance of that class.

5. Instantiate:

Instantiating means creating an instance (or object) from a class.

6. Instance Variable:

An instance variable is a variable defined in a class for which each instantiated object of the class has a separate copy.

7. New:

The new keyword in Java is used to create new objects.

8. Constructor:

A constructor is a special method in a class that gets called when an object is instantiated. It is used to initialize objects, typically setting initial values for the instance variables.

9. Encapsulation:

Encapsulation refers to restricting access to certain details of an object and only exposing a controlled interface.

10. Private:

Private is an access modifier that restricts the visibility of variables, methods, or constructors to the class they are defined in.

11. Public:

Public is an access modifier that makes variables, methods, or constructors accessible from outside the class.

12. Getter:

A getter is a method that provides read access to a private instance variable.

13. Setter:

A setter is a method that allows modifying the value of a private instance variable.

14. Instance Method:

An instance method is a method that belongs to an instance of a class (object). It can access the instance variables and other instance methods.