1. In programming, when a block of code/function calls itself repeatedly is said to be__

    a. Method overloading

    b. Method overridden

    c. Recursion

    d. Polymorphism

2. A Recursive call without a **base case** will lead __ error.

    a. IndexOutOfBound

    b. Stackoverflow

    c. InpustMisMatched

    d. None of the above

3. Using a Recursive Tree to solve the Fibonacci Sequence: `fibo(n)` is said to be the __ of the tree.

    a. Right child

    b. Left child

    c. Brand

    d. Root

4. When the left child of a Recursive Tree is `fibo(n - 1)'`, what is the formula for the right?

    a. `fibo(n - 1)`

    b. `fibo(n - 1)` + `fibo(n - 1)`

    c. `fibo(n - 0)`

    d. `fibo(n - 2)`

5. In computer science, time and space are the two fundamental resources required for executing any operation.

    a. True

    b. False

6. What is the mathematical way to describe how fast an algorithm grows (its time complexity) and how much extra memory it uses (its space complexity) as the input size increases?

    a. Object Oriented Programming

    b. Big O Notation

    c. Data Structures

d. Fibonacci Sequence

7. In Object-Oriented Programming, a class is created first and defines the properties and behaviors of an object before the object is created.

    a. True

    b. False

8. In Object Oriented Programming, object creation happens at ___

    a. Compile time

    b. Run time

    c. a and b

    d. None of the above

9. ___ also acts a blueprint for other classes.

    a. Final class

    b. Enum

    c. Abstract class

    d. Interface

10. __ is a type of class in Java that is used to define predefined types that other classes/objects can use.

    a. Enum

    b. Constructor

    c. Interface

    d. Abstract class

11. Java provides built-in Data types, which are primitive types, while programmers can create __ define types.

    a. Compiler

    b. User

    c. Command line

    d. None of the above

12. A Data Structure where values are arranged in sequence is called__.

    a. Linear data structure

    b. None linear data structure

    c. All of the above

    d. None of the above

13. An Array's values are called items/elements, while a LinkedList's are___.

    a. Class

b. Branch

c. Node

d. Object

14. Internally, all the Data structures are arrays in Java.

a. True

b. False

15. A Data structure where a value is mapped with a key-value pair.

a. LinkedList

b. Stack

c. Queue

d. HashMap