Coding Question

**Q1- Write a Java program to find how many numbers in the array are Armstrong’s numbers.**

**Sample input: 153**

**Calculation: 1\*1\*1 + 5\*5\*5 + 3\*3\*3 = 153**

**Sample output: Is an Armstrong’s number**

**Another Sample input: 123**

**Calculation: 1\*1\*1 + 2\*2\*2 + 3\*3\*3 = 36**

**Sample output: Is not an Armstrong’s number**

**Q2- Write a Java program to find the total number of Tokens in the string.**

**You need to keep the track of following delimiters**

**‘@’, ‘#’, ‘ ’, ‘,’, ‘\*’**

**You need to make a Class named as StringTokenizer with private string data member and method int countTokens().**

**Sample Input: Hello@my#name\*is,ABC XYZ**

**Sample Output: Count = 6**

**Q3- Perform Encapsulation(getters) for the following members in RunEncapTest and write Output of the code?**

public class RunEncapTest {

private String Name;

private int Age;

private int id;

//write default constructors and parameterized constructor with three parameters

//write getters

//write setter

}

public static void main(String args[ ][ ])

{

EncaptulationTest encap = new EncapsulationTest();

//call setters for initialization

//call getter and print values

}

Sample Output:

This would produce following output: Name: John Age: 28 Id: 12345.

**Q4-** **Solve the problem given below**

1. A class named ***Operation*** with a method named ***reverse*** that takes integers as parameters and returns an integer denoting their sum.
2. A class named ***Operator*** that inherits from a superclass named *Operation*.

Your classes should not be public.

**Input Format**

You are not responsible for reading any input from user; a locked code stub will test your submission by calling the *reverse* method on an *Operator* object and passing it **String** parameter.

**Output Format**

You are not responsible for printing anything. Your *reverse* method must return the reverse of the string and the position of asterisks should not change.

**Sample Input:**

* ABC\*\*bca\*
* \*hel\*\*l\*o

**Sample Output:**

The *main* method in the *Solution* class above should print the following:

My superclass is: Operation

* acb\*\*CBA\*
* \*oll\*\*e\*h

**Q5- Write a program with a parent class animal. Inside it define a name and an age variables, and set\_value() function.Then create two base variables Zebra and Dolphin which write a message telling the age, the name and giving some extra information (e.g. place of origin).**

**Q- Run and observe the behavior of the code and fix the problem in the code given below.**

**Sample Output:**

Hello I am a motorcycle, I am a cycle with an engine.

My ancestor is a cycle who is a vehicle with pedals.

class BiCycle{

    String define\_me(){

        return "a vehicle with pedals.";

    }

}

class MotorCycle extends BiCycle{

    String define\_me(){

        return "a cycle with an engine.";

    }

    MotorCycle(){

        System.out.println("Hello I am a motorcycle, I am "+ define\_me());

        String temp=define\_me();

        System.out.println("My ancestor is a cycle who is "+ temp );

    }

}

class Solution{

    public static void main(String []args){

        MotorCycle M=new MotorCycle();

}

}