Day 4 Assignment

Q1) Differentiate between static and non-static variables?

Q2) Create a class Lion with following members:
- String name;
- boolean isHungry;
- int age;
- static int totalDeaths;
- static printKillings() : void
- thinking() : void

printKillings() should print this ("Total killings by lions in jungle = "+ totalDeaths);

Implement thinking() in the following manner-

- if isHungry=false then print LionName is sleeping;

- if isHungry=true and age>12 then increase the totalDeaths by two and print lionName has eaten two animal

- if isHungry=true and age<=12 and age >=2 then increase the totalDeaths by one and print lionName has eaten one animal

- if isHungry=true and age<2   then print lionName is calling Mom;

Inside the main method of Lion Make 3 objects(lion1, lion2, lion3) of class Lion and assign valid values to variables and call thinking() for each object. then print totalDeaths by calling **printKillings()** ;

Sample output-
    lion1 has killed two animal
    lion2 has killed one animal
    lion is sleeping
    Total Killings by lion in jungle 3

Note: This output is just for reference, you can assign any value to the lion object.

Q3) Create a class Student with 3 instance variables:

- roll: int
- name: String
- marks: int

Create a non-static method inside the Student class:

`displayStudentDetails: void`

inside the above method print all the details of the student in the following format:

`Roll is :`

`Name is :`

`Marks is :`

From the main method of the Student class create 2 Student class objects and set the proper details to both objects and call the above displayStudentDetails method on the both student objects.

After calling the method on both student objects, make both the objects eligible for the garbage collector.

Q4) Write a non-static method inside a java class that accepts a whole number and prints the same number if the input is Odd. If the input is even, it should print the next multiple of ten. If the input is negative, print the string: "Error".Call this method from your main method and observe the output.

Sample Output:
> Input: 44, output: 50
> Input: 45, output: 45
> Input: -5, output: Error