

OOP with Java

CT3-CT4

I Class Animal

Complete and store in a Zoo package.

```
public class Animal {
    private int
    poids; private
    String nom;

    //constructor by default, constructor with two parameters
    // accessors for attributes
    // modifier (accessor for writing) for the attribute weight
    // use the method toString

}
```

II Class Dog

Complete and store in a Zoo package.

- Define a class Dog : subclass of Animal. The Dog class has a an attribute « Owner » (instance variable), defined as a String object.
- Define a constructor to initialize the 3 attributes of a dog.
- Write the read and write accessors for the master attribute.
- Write the toString method

II Class Use

```
public static void main (String args[]) {
    // define an instance of Animal
    // define an instance of Dog
    // display the dog's name, weight and the name of its owner
    // define two other instances of Dog
    // define a table containing the 4 instances above
    // Display the names of the 4 animals in a loop.
```

Question: Explain the resulting display

III Class Cat

Complete and store in a Zoo package

- Define a class Cat : a subclass of Animal. The class Cat has an

attribute(variable of instance) « breed », defined as a string.

- Define a constructor to initialize the 3 attributes of the Cat.
- Write the accessor (getter) for the attribute « breed ».
- Write the method toString.

IV **Class Use**

complete the Use class defined previously by adding a cat....