

# Compte rendu du Prosit2

## Instruction 5 : Création des classes

classe Zoo:

```
public class Zoo { 2 usages
    Animal[] animals = new Animal[25]; 2 usages
    String name; 4 usages
    String city; 4 usages
    int nbrCages; 4 usages
}
```

classe Animal:

```
public class Animal { 11 usages
    String family; 5 usages
    String name; 5 usages
    int age; 5 usages
    boolean isMammal; 5 usages
}
```

classe main:

```
public class Main {
    public static void main(String[] args) {

        Animal a1 = new Animal( family: "Félin", name: "Lion", age: 5, isMammal: true);
        System.out.println("Animal : " + a1.family + ", " + a1.name + ", " + a1.age + " ans, Mammifère : " + a1.isMammal);

        Animal a2 = new Animal( family: "Félin", name: "Lion", age: 5, isMammal: true);
        System.out.println("Animal : " + a2.family + ", " + a2.name + ", " + a2.age + " ans, Mammifère : " + a1.isMammal);

        Animal a3 = new Animal( family: "Félin", name: "Lion", age: 5, isMammal: true);
        System.out.println("Animal : " + a3.family + ", " + a3.name + ", " + a3.age + " ans, Mammifère : " + a3.isMammal);

        Animal[] animaux = { a1, a2 };
        Zoo z = new Zoo(animaux, name: "Mon zoo", city: "Tunis", nbrCages: 10);
        System.out.println(" Nombre d'animaux : " + z.animals.length + " Zoo : " + z.name + ", Ville : " + z.city + ", Cages : " + z.nbrCages );

        z.displayZoo();
        System.out.println(z);
    }
}
```

## Instruction 6 : Constructeurs paramétrés

Constructeur de la classe Zoo:

```
public Zoo(Animal[] animals, String name, String city, int nbrCages) { 1 usage
    this.animals = new Animal[25];
    this.name = name;
    this.city = city;
    this.nbrCages = nbrCages;
}
```

Constructeur de la classe Animal:

```
public Animal (String family, String name, int age, boolean isMammal){ 3 usages
    this.family=family;
    this.name=name;
    this.age=age;
    this.isMammal=isMammal;
}
```

Création d'objet sans constructeur paramétré:

```
Animal lion = new Animal();
lion.family = "Félin";
lion.name = "Lion";
lion.age = 5;
lion.isMammal = true;
```

## Instruction 8 : Méthode displayZoo().

```
public void displayZoo() { 1 usage
    System.out.println("nom du zoo:" + name);
    System.out.println("ville du zoo:" + city);
    System.out.println("le nombre de cages du zoo:" + nbrCages);
}
```

## Exécution:

```
C:\Users\ghofr\.jdk\openjdk-23.0.1\bin\java.exe "-javaagent:C:\Program
Animal : Félin, Lion, 5 ans, Mammifère : true
Animal : Félin, Lion, 5 ans, Mammifère : true
Animal : Félin, Lion, 5 ans, Mammifère : true
  Nombre d'animaux : 25 Zoo : Mon zoo, Ville : Tunis, Cages : 10
nom du zoo:Mon zoo
ville du zoo:Tunis
le nombre de cages du zoo:10
zoo{name:Mon zoo, city:Tunis, nbrCages:10}
```