

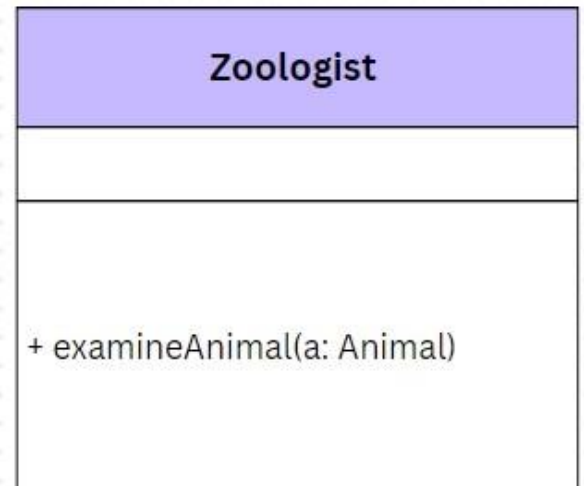
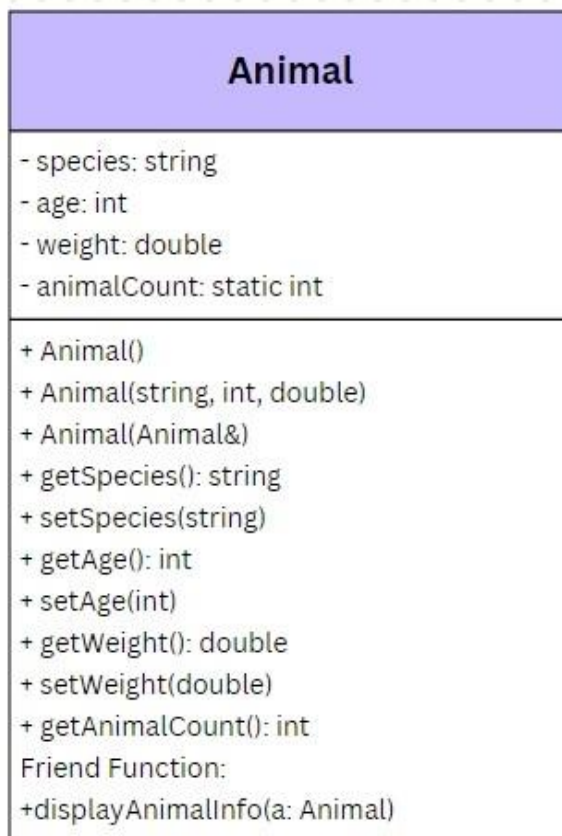
Topics covered in this lab:

1. Static member variables
2. Static member functions
3. Friend functions and class

Section A

1. What are friend functions and where are they implemented?

Problem 1:



- Make a destructor function in the Animal class

Object Oriented Programming Lab#6

Zoologist Class:

- **Member Functions:**

- examineAnimal(a: Animal) Accesses and possibly modifies the private members of an Animal object.
- Print a statement “Examining the animals’ species, age, and weight” and access the attributes of the animal.
- Modify animal’s weight by adding 5.

Friend Function:

- displayAnimalInfo(a: Animal) A friend function that can access the private member variables of Animal, Takes an Animal object as a parameter and prints out its private member variables.

Write a main () function to demonstrate:

- Creating Animal objects using different constructors.
- Using getters and setters to access and modify the attributes of Animal objects.
- Accessing private members via the friend function displayAnimalInfo(a: Animal).
- Accessing private members via the friend class Zoologist.
- Calling the static member function getAnimalCount() and showing the effect of the static member variable animalCount.