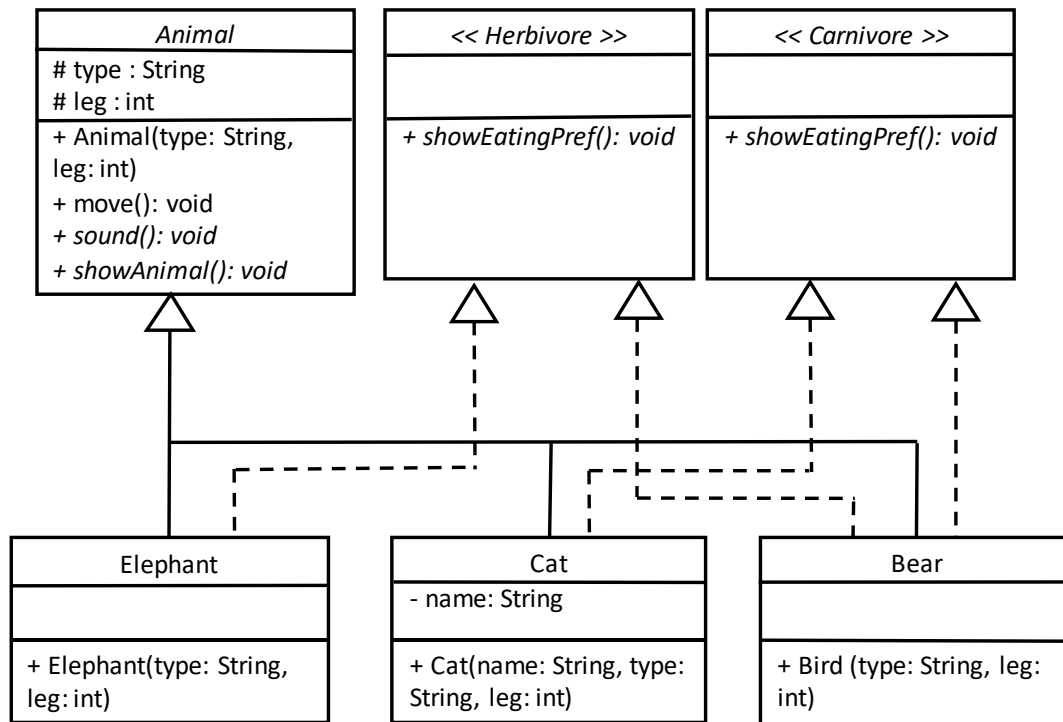


This is an open-note task (personal note and UTeM uLearn material only).
I pledge on my honor that I have not given or received any unauthorized
assistance (human or machine) on this given task.

Matric number : D031234567	Full Marks	Marks
XX January 2025	50	

SAMPLE Lab Test 2

Write a complete Java program based on the given UML class diagram.



Class *Animal* is abstract because method `sound()` is abstract.

Herbivore and *Carnivore* are interfaces.

Concrete method `move()` displays how the animal moves using the number of legs.

Abstract method `sound()` displays how the animal sounds.

Abstract method `showAnimal()` displays all information about the animal.

Abstract Method `showEatingPref()` displays an animal's eating preference.

The subclass constructor must make use of the superclass constructor.

You are to write all necessary setter and getter methods.

Test your AnimalDemo program using these suggested objects
(Proposed output in bold):

```
Elephant elephant1 = new Elephant("mammal", 4);  
elephant1.move();  
elephant1.sound();  
elephant1.showEatingPref();
```

**This animal moves with 4 legs.
Elephants rumble and trumpet.
This animal is a herbivore.**

```
Cat cat1 = new Cat("QuPuteh", "mammal", 4);  
cat1.showAnimal();
```

**QuPuteh is a cat.
This animal has 4 legs. It walks, jumps and runs
Cats purr and meow.
This animal is a carnivore.**

```
Bear bear1 = new Bear("mammal", 4);  
bear1.sound();  
bear1.move();  
bear1.showEatingPref();
```

**Bears growl and huff.
This animal moves with 4 legs.
This animal is omnivore; both a herbivore and carnivore.**