LAB11_ANP_C6339_INHERITANCE_OVERRIDE

Due date: Tuesday, 21 November 2023, 5:30 AM
Maximum number of files: 1
Type of work: Individual work
Lingabathula Thapaswi[AF0339471]

Assignment-1.

Write a Java program that demonstrates method overriding by creating a superclass called Animal and two subclasses called Dog and Cat.

● The Animal class should have a method called makeSound(), which simply prints "The animal makes a sound."

● The Dog and Cat classes should override this method to print "TheCat/The dog meows/barks" respectively.

● The program should allow the user to create and display objects of each

Solution:-

// Animal class

class Animal {

  public void makeSound() {

    System.out.println("The animal makes a sound.");

  }

}

// Dog class

class Dog extends Animal {

  @Override

  public void makeSound() {

    System.out.println("The dog barks.");

  }

}

// Cat class

class Cat extends Animal {

  @Override

  public void makeSound() {

    System.out.println("The cat meows.");

```java
  }
}


// Main class
public class AnimalMain {
  public static void main(String[] args) {
    // Create an Animal object
    Animal animal = new Animal();
    animal.makeSound();


    // Create a Dog object
    Dog dog = new Dog();
    dog.makeSound();


    // Create a Cat object
    Cat cat = new Cat();
    cat.makeSound();
  }
}
```

Output:

```
C:\Users\thila\OneDrive\Desktop\Anudip_Labs>javac AnimalMain.java

C:\Users\thila\OneDrive\Desktop\Anudip_Labs>java AnimalMain
The animal makes a sound.
The dog barks.
The cat meows.
```