**OOPS**

**Inheritance Example Code**

**class Animal {**

**String name;**

**public Animal(String name) {**

**this.name = name;**

**}**

**public void speak() {**

**System.out.println(name + " makes a sound");**

**}**

**}**

**class Mammal extends Animal {**

**public Mammal(String name) {**

**super(name);**

**}**

**public void giveBirth() {**

**System.out.println(name + " gives birth to live young.");**

**}**

**}**

**class Reptile extends Animal {**

**public Reptile(String name) {**

**super(name);**

**}**

**public void layEggs() {**

**System.out.println(name + " lays eggs.");**

**}**

**}**

**class Whale extends Mammal {**

**public Whale(String name) {**

**super(name);**

**}**

**@Override**

**public void speak() {**

**System.out.println(name + " makes whale sounds");**

**}**

**}**

**class Dog extends Mammal {**

**public Dog(String name) {**

**super(name);**

**}**

**@Override**

**public void speak() {**

**System.out.println(name + " barks");**

**}**

**}**

**class Crocodile extends Reptile {**

**public Crocodile(String name) {**

**super(name);**

**}**

**@Override**

**public void speak() {**

**System.out.println(name + " roars");**

**}**

**}**

**class Snake extends Reptile {**

**public Snake(String name) {**

**super(name);**

**}**

**@Override**

**public void speak() {**

**System.out.println(name + " hisses");**

**}**

**}**

**class Lion extends Mammal {**

**public Lion(String name) {**

**super(name);**

**}**

**@Override**

**public void speak() {**

**System.out.println(name + " roars like a lion");**

**}**

**}**

**class Turtle extends Reptile {**

**public Turtle(String name) {**

**super(name);**

**}**

**@Override**

**public void speak() {**

**System.out.println(name + " makes a slow, hissing sound");**

**}**

**}**

**public class Main {**

**public static void main(String[] args) {**

**Whale whale = new Whale("Whale");**

**Dog dog = new Dog("Dog");**

**Crocodile crocodile = new Crocodile("Crocodile");**

**Snake snake = new Snake("Snake");**

**Lion lion = new Lion("Lion");**

**Turtle turtle = new Turtle("Turtle");**

**whale.speak();**

**whale.giveBirth();**

**dog.speak();**

**dog.giveBirth();**

**crocodile.speak();**

**crocodile.layEggs();**

**snake.speak();**

**snake.layEggs();**

**lion.speak();**

**lion.giveBirth();**

**turtle.speak();**

**turtle.layEggs();**

**}**

**}**