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Experiment # 10: Practicing Single & Multilevel Inheritance

Write java codes that illustrate respectively single, multilevel, and hierarchical inheritance.

```
public class Animal {
    void eat(){
        System.out.println("This animal can eat");
    }
}
```

```
Practical_OOP > Lab_5 > J Animal.java > ...

1    public class Animal {
2         void eat(){
3             System.out.println(x:"This animal can eat");
4         }
5    }
6
```

```
public class Dog extends Animal {
   void bark(){
      System.out.println("The dog barks.");
   }
}
```

```
Practical_OOP > Lab_5 > J Dog.java > ...

1  public class Dog extends Animal {
2     void bark(){
3          System.out.println(x:"The dog barks.");
4     }
5 }
```



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```
public class SingleInheritance{
   public static void main(String [] args)
   {
      Dog myDog = new Dog();
      myDog.eat();
      myDog.bark();
   }
}
```

```
This animal can eat
The dog barks.
```

```
public class Puppy extends Dog {
    void weep(){
        System.out.println("The puppy is weeeping.");
    }
}
```

```
public class Puppy extends Dog {
    void weep(){
        System.out.println(x:"The puppy is weeeping.");
    }
}
```



```
public class MultiLevelInheritance {
   public static void main(String[] args) {
      Puppy myPuppy = new Puppy();

      myPuppy.eat();
      myPuppy.bark();
      myPuppy.weep();
   }
}
```

```
public class MultiLevelInheritance {
    Run|Debug
    public static void main(String[] args) {
        Puppy myPuppy = new Puppy();

        myPuppy.eat();
        myPuppy.bark();
        myPuppy.weep();
    }
}
```

```
n' 'MultiLevelInheritance'
This animal can eat
The dog barks.
The puppy is weeeping.

public class Cat extends Animal {
   void meow(){
      System.out.println("The cat meows.");
   }
}

public class Cat extends Animal {
   void meow(){
      System.out.println(x:"The cat meows.");
   }
}
```



```
public class HierarchicalInheritance {
  public static void main(String[] args) {
    Dog myDog = new Dog();
    Cat myCat = new Cat();
    myDog.eat();
    myDog.bark();
    myCat.eat();
    myCat.meow();
}
```

```
public class HierarchicalInheritance {
    Run | Debug
    public static void main(String[] args) {
        Dog myDog = new Dog();
        Cat myCat = new Cat();

        myDog.eat();
        myDog.bark();

        myCat.eat();
        myCat.meow();
    }
}
```

```
n' 'HierarchicalInheritance'
This animal can eat
The dog barks.
This animal can eat
The cat meows.
```