Important Definitions

Programming: A way to tell a computer what to do in a language both you and the computer understand

Object-oriented: A programming language is object-oriented if it uses objects and classes in every program

Class: A blueprint for an object. It lays out what each object in that class will look like and what properties it will have

Object: An instance of a class

Syntax: Grammar for the computer

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Classes, Objects, and Methods

Example: Animals

Object: Lion

Lion is an animal. Its type is Lion, its name is Leo, and it is a predator. It says “roar”.

Class Animal

- type of animal

- name of animal

- predator?

- Any animal can make a sound specific to it’s type.

When you create a class, one important thing to remember is a constructor. A constructor is used to build each object of the class.

**Here’s what everything would look like in code:**

public class Animal

{

Properties of Animal

private String type;

private String name;

private String sound;

private boolean isPredator;

public Animal(String t, String n, String s, boolean p)

{

type = t;

Constructor

name = n;

sound = s;

isPredator = p;

}

public void speak()

Method

{

System.out.println(sound);

}

}

After you have a class, you can create an object of that class in another program:

public class Driver

{

public static void main(String[] args)

{

Animal l = new Animal(lion, leo, roar, true);

l.speak();

}

}