Data Types and Expressions

Creating new objects
BankAccount alice = new BankAccount();
alice.deposit(50);
System.out.println("Alice has $" + alice.getBalance());
⇒ Would print: Alice has $50
Suppose: GraphicsPanel — class
   add graphics objects: Ellipse, Rectangle

   GraphicsPanel gp = new GraphicsPanel();
   gp.add(new Rectangle(50, 50, 100, 150));
   gp.add(new Ellipse(50, 50, 100, 100));
   gp.add(new CrossHairs(gp, 80, 90));
public void crossHairs(GraphicsPanel gp, int x, int y) {
    gp.add(new Line(x+5, y, x+5, y+10));
    gp.add(new Line(x, y+5, x+10, y+5));
}
Color c = new Color(250, 50, 150);

int r = c.getRed();

Immutable objects — can’t change after creation

Color other = c.brighter();
We know:

1. A class defines a type of object.
2. Inside every object, there are instance variables that hold information (balance, red, green, blue, width, height.)

Together, the instance variables are the internal representation.