

**Chalk Chuck Example**  
CPS109, A Ferworn, Fall 15

```
public class Chalk
{
    public int amount_left;

    //Constructor method
    public Chalk()
    {
        amount_left = 10;
    }

    // Use the chalk
    public void use()
    {
        amount_left = amount_left - 1;
    }

    // How much chalk is left?
    public int how_much()
    {
        return amount_left;
    }
}
```

```
public class ChalkDriver
{
    public static void main(String[] args)
    {
        Chalk yellow = new Chalk();

        System.out.println("Yellow new: " +yellow.how_much());
        yellow.use();
        System.out.println("Yellow used once: "
            + yellow.how_much());

        Chalk white = new Chalk();
        System.out.println("White new: "
            + white.how_much());
        white.use();
        white.use();
        System.out.println("Yellow: "
            + yellow.how_much());
        System.out.println("White after two uses: "
            + white.how_much());
    }
}
```



```

public class Chuck
{
    public boolean empty;
    public Chalk loadedChalk;

    //Constructor method
    public Chuck()
    {
        empty = true;
    }
    // Load the chuck
    public void load(Chalk piece)
    {
        loadedChalk = piece;
        empty = false;
    }
    // Unload the chuck
    public Chalk unload()
    {
        empty = true;
        return loadedChalk;
    }
    // How much chalk is left?
    public int how_much()
    {
        return loadedChalk.how_much();
    }
    // Use the chuck with chalk
    public void use()
    {
        loadedChalk.use();
    }
}

public class ChuckDriver
{
    public static void main(String[] args)
    {
        Chalk yellow = new Chalk();
        System.out.println("Yellow new: " +
            yellow.how_much());
        yellow.use();
        System.out.println("After Yellow used: "
            + yellow.how_much());

        Chuck silverChuck = new Chuck();
        silverChuck.load(yellow);
        System.out.println
            ("I put the yellow chalk in the chuck");
        silverChuck.use();
        System.out.println("I use the chalk in the chuck");
        System.out.println
            ("This is how much is left in the chuck: " +
            silverChuck.how_much());
        silverChuck.unload();
        System.out.println("I take the chalk out of the chuck");
        System.out.println("After Yellow used: "
            + yellow.how_much());
    }
}

```



**Chalk Chuck**