

# Bicycle Class Example

```
public class BicycleClass
{
    // private instance vars
    private int cadence;
    private int speed;
    private int gear;

    //constructor with no args, default to 0,0,1
    BicycleClass () {
        cadence=0;
        speed=0;
        gear=1;
    }

    //constructor with 3 args passed in
    BicycleClass (int initCadence, int initSpeed, int initGear) {
        cadence=initCadence;
        speed=initSpeed;
        gear=initGear;
    }

    void setCadence(int newValue) {
        cadence = newValue; }

    void setGear(int newValue) {
        gear = newValue; }

    void setSpeed(int increment) {
        speed = speed + increment; }

    void setBrakes(int decrement) {
        speed = speed - decrement; }

    void printStates() {
        System.out.println("cadence: " +
                           cadence + " speed: " +
                           speed + " gear: " + gear);
    }

    public static void main(String[] args) {
        BicycleClass bike1 = new BicycleClass();
        // BicycleClass bike1 = new BicycleClass(30,10,3);
    }
}
```

```
System.out.print ("Initial states: ");
bike1.printStates();
// Invoke methods on those objects
bike1.setCadence(50);
bike1.setSpeed(10);
bike1.setGear(5);
bike1.setBrakes(2);

System.out.print ("Updated states: ");
bike1.printStates();
}

}
```