**public** **class** Counter {

 **protected** **int** start;

 **protected** **int** count;

 **public** Counter(**int** value) {

 **this**.start = **this**.count = value;

 }

 **public** **void** increment() {

 count++;

 }

 **public** **void** reset() {

 count = start;

 }

 **public** String toString() {

 **return** "(" + count + ")";

 }

}

**public** **class** AdvancedCounter **extends** Counter {

 **private** **int** amount;

 **public** AdvancedCounter(**int** value, **int** amount) {

 **super**(value);

 **this**.amount = amount;

 }

 **public** **void** increment() {

 count += amount;

 }

}

**public** **class** LimitedCounter **extends** Counter {

 **private** **int** limit;

 **public** LimitedCounter(**int** value, **int** limit) {

 **super**(value);

 **this**.limit = limit;

 }

 **public** **void** increment() {

 **if** (count >= limit) {

 System.***out***.println("Reached limit, cannot increment anymore.");

 }

 **else** {

 count++;

 }

 }

}

**public** **class** TestCounter {

 **public** **static** **void** main(String[] args) {

 Counter basic = **new** Counter(0);

 Counter limited = **new** LimitedCounter(0, 3);

 Counter advanced = **new** AdvancedCounter(0, 2);

 basic.increment();

 limited.increment();

 limited.increment();

 limited.increment();

 limited.increment();

 advanced.increment();

 System.***out***.println(basic.toString());

 System.***out***.println(limited.toString());

 System.***out***.println(advanced.toString());

 limited.reset();

 System.***out***.println(limited.toString());

 }

}