Class Counter

```
public class Counter {
	protected int start;
	protected int count;

	public Counter(int value){
		start = value;
		count = start;
	}

	public void increment(){
		count++;
	}

	public void reset(){
		count = start;
	}

	public String toString(){
		return "(" + count + ")";
	}
}
```

Class LimitedCounter

```
public class LimitedCounter extends Counter {

	private int limit;
	private int start;

	public LimitedCounter(int value, int limit){
		super(value);
		this.limit = limit;
	}

	@Override
	public void increment(){
		if(count == limit)
			System.out.println(" limit has been reached");
		else
			count++;
	}
}
```

Class AdvancedCounter

```
public class AdvancedCounter extends Counter{
	private int amount;

	public AdvancedCounter(int value, int amount) {
		super(value);
		this.amount = amount;
	}

	@Override
	public void increment(){
		count += amount;
	}
}
```

Class Test

```
public class test {

	public static void main(String[] args) {
		// TODO Auto-generated method stub

		Counter c1 = new Counter(0);
		AdvancedCounter c2 = new AdvancedCounter(0, 3);
		LimitedCounter c3 = new LimitedCounter(0,3);

		c1.increment();
		c2.increment();
		c3.increment();

		System.out.println(c1);
		System.out.println(c2);
		System.out.println(c3);

		c3.increment();
		c3.increment();
		c3.increment();
		System.out.println(c3);
		c3.reset();
		System.out.println(c3);

	}

}
```