```java
public class Counter {

    protected int start, count;

    public Counter(int start){
        this.start = this.count = start;
    }

    public void increment(){
        count++;
    }

    public void reset(){
        count = start;
    }

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

```
public class LimitedCounter extends
Counter{

    private int limit;

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

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

```
public class AdvancedCounter extends
Counter{

    private int amount;

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

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

```java
public class Test {

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

		Counter basic = new Counter(0);
		LimitedCounter limited = new
LimitedCounter(0,5);
		AdvancedCounter advanced = new
AdvancedCounter(0,2);
		basic.increment();
		limited.increment();
		advanced.increment();
		System.out.println("Basic: " + basic);
		System.out.println("Limited: " + limited);
		System.out.println("Advanced: " + advanced);
		limited.increment();
		limited.increment();
		limited.increment();
		limited.increment();
		limited.increment();
		System.out.println("Limited: " + limited);
		limited.reset();
		System.out.println("Limited: " + limited);

	}

}
```