

## One More Test Satisfies All Other Requirements!

Given an extra space of 2,

- requirement #3 means that one region should be 1, and
- a region of 3 satisfies requirements #4 and #5.

Together, the two regions above satisfy #6.

So we could try...

**Test #2: 1 3 0 0 7, which should**  
**print "...X...\n".**

## Let's Try the Code on Our Coverage Tests

As you see, we need only two tests to cover all of the code.

Let's try them...

**Test #1: 1 2 3 4 12, which should fail.**

**Test #2: 1 3 0 0 7, which should**  
**print "...X...\n".**

**The code passes both tests!**

## Can We Cover Code Blocks that Are Empty?

Let's be slightly more thorough.

When we see

- an **if** statement with an **else**,
- we cover both then and else blocks.

**Did we cover else blocks that do nothing?**

Let's take a look.

## Need a Test with at Least One Zero Region

```
int i, j, a, num = 0;
int u[4];
u[0] = r1;
u[1] = r2;
u[2] = r3;
u[3] = r4;
for (i = 0; 4 > i; i++) {
    if (0 != u[i]) {
        num++;
    }
}
```

We need at least one zero region to execute the "else" (but we have zero regions in test #2).