Level 0

```
void test()
{
    int val;
    /* Put canary on stack to detect possible corruption */
   volatile int local = uniqueval();
   val = getbuf();
    /* Check for corrupted stack */
   if (local != uniqueval()) {
        printf("Sabotaged!: the stack has been corrupted\n");
    }
   else if (val == cookie) {
       printf("Boom!: getbuf returned Ox%x\n", val);
       validate(3);
    } else {
       printf("Dud: getbuf returned 0x%x\n", val);
   }
}
```

Smoke

```
void smoke()
{
    printf("Smoke!: You called smoke()\n");
    validate(0);
    exit(0);
}
```

Level 1

```
void fizz(int val)
{
    if (val == cookie) {
        printf("Fizz!: You called fizz(0x%x)\n", val);
        validate(1);
    } else {
        printf("Misfire: You called fizz(0x%x)\n", val);
    }
    exit(0);
}
```

Level 2

```
int global_value = 0;

void bang(int val)
{
    if (global_value == cookie) {
        printf("Bang!: You set global_value to 0x%x\n", global_value);
        validate(2);
    } else {
        printf("Misfire: global_value = 0x%x\n", global_value);
    }
    exit(0);
}
```