

```

#include <stdlib.h>
#include <string.h>
#include <assert.h>
#include <stdio.h>

/* char *stringDuplicator(char *s, int times) {
    assert(!s);
    assert(times > 0);
    int LEN = strlen(s);
    char *out = malloc(LEN * times);
    assert(out);
    for (int i = 0; i < times; i++) {
        out = out + LEN;
        strcpy(out, s);
    }
    return out;
} */

```

/ Conventions mistakes:*

- * 1. LEN written in capital letters. (line 8)*
 - * 2. there is no indentation after the lines that come after the "for" loop. (line 12,13)*
 - * 3. should name the function as a verb, like: "stringDuplicate" or "duplicateString". (line 5)*
 - * 4. Should set a more proper and meaningful name to the parameter out. (line 10)*
 - * 5. there is no comments of the code (what the code does etc.).*
- */*

/ Programming mistakes:*

- * 1. not added enough space in the malloc allocation for the "/0" char needs to add +1 at the end. (line 9)*
 - * 2. need to assert "s", not "!s" - !s will assert the input is NULL. (line 7)*
 - * 3. you cant assert "out" because its allocated so you must check if its null or not. (line 10)*
 - * 4. "out" pointer inside the for loop starts with the second duplicated word (it will print the word times-1 times). (line 12)*
 - * 5. Pointer out is updated inside the loop so it will return NULL instead of the first letter in the char*. (line 15)*
- */*

```

// corrected code:
#include <stdlib.h>
#include <string.h>
#include <assert.h>
#include <stdio.h>

//duplicates a string the number of times as the user asks
char *duplicateString(char *s, int times) {
    assert(s);
    assert(times > 0);
    int len = strlen(s);

    char *duplicated_string = malloc(len * times + 1);
    if (!out) {
        return NULL;
    }
    char* tmp_ptr = duplicated_string;
    for (int i = 0; i < times; i++) {
        strcpy(duplicated_string, s);
        duplicated_string = duplicated_string + len;
    }
    return tmp_ptr; //pointer to the beginning of the duplicated string.
}

```