

```

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

char *my_strcpy(char * , const char * );

int main()
{
    char src[] = "cs23!";
    char dst[]="Hello hello";
    char *curdst;
    int len=0;

    printf("src address %p and first char %c \n", (void *)&src, src[0]);
    printf("dst address %p and first char %c \n", (void *)&dst, dst[0]);

    // compute where NULL character is '\0' ASCII 0

    // while(src[len++]); THE BUG. What was the problem?

    while(src[++len]); // THE FIX: How does this fix it? **001**

    // print out the char arrays and various addresses.

    printf("src array %s and last element %d\n", src, atoi(&src[len]));
    printf("dst array %s and last element %c\n", dst, dst[len]);

    // do the copy

    curdst= my_strcpy(dst, src);

    // check to see if the NULL char is copied too.

    printf("dst array %s and last element %d\n", dst, atoi(&dst[len]));

    return 0;
}

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    // compute where NULL character is '\0' ASCII 0

    while(src[len++]);

    // print out the char arrays and various addresses.

    printf("src array %s and last element %d\n", src, atoi(&src[len]));
    printf("dst array %s and last element %c\n", dst, dst[len]);

    // do the copy
    curdst= my_strcpy(dst, src);

    // check to see if the NULL char is copied too.

    printf("dst array %s and last element %d\n", dst, atoi(&dst[len]));

    return 0;
}

```

這兩個code最主要的差異在於

`while ( src[++len]);`

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最後正確為 `while ( scr[++len])`

`++len` : 先加在做，當判斷為0(即'\0')，會直接結束執行與跳出迴圈，不會有字串多加的問題。

`len++` : 先做再加，即使一開始判斷為0，最後還是會+1，與實際情況不合。