```
#include <stdio.h>
#include <string.h>
int main(){
    char str[500], mod[1000], ch;
    gets(str);
    ch = getchar();
    int i, k, len = strlen(str);
    // Need a new counter for modified string since it may be longer
    // than the original string due to the ** insertions
    k = 0;
    for(i = 0; i < len; i++){}
        if(str[i] == ch){}
            // Insert two asterisks into the modified string
            mod[k++] = '*';
mod[k++] = '*';
        }
        else
            // Insert the character itself
            mod[k++] = str[i];
    }
    mod[k] = '\0'; // Dont forget the NULL character
    printf("%d\n%s", strlen(mod), mod);
    return 0;
}
```