TRANS(3L)

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NAME

trans -- translate characters

SCCS

SYNOPSIS

trans(s1,s2) char *s1, *s2;

DESCRIPTION

<u>Trans</u> returns an integer indicating the number of characters translated. If the value returned is -1 an illegal parameter was passed to the subroutine. <u>Trans</u> is a function which translates characters in string <u>s1</u> based on the contents of <u>s2</u>. String <u>s2</u> consists of character pairs. If the first character of a character pair is found in string <u>s1</u>, that character is replaced with the second character of the character pair.

s1 the processed character string.

s2 a string of characters used as a pattern.

The pattern string, <u>s2</u>, is a null terminated string of characters whose content is character pairs. The length of <u>s2</u> as determined by <u>len</u> must be even. This function can be used to count the occurrence of a given character. For example, the pattern "AA" will count the number of capital A's in the string <u>s1</u>. If two character pairs have the same first character, the last character pair dominates. The pattern string "?Mississippi" is equivalent to "?Mssippi". Note that the pattern "?Mssippi" will change all i's to p's and all p's to i's in the source string. To capitalize the letters in a string one can use the 52 character string "aAbBcC...zZ" as a pattern string.

This function is implemented with a table driven pattern matcher. The empty string is defined as a string whose first character is the null character. If either $\underline{s1}$ or $\underline{s2}$ is empty the value returned is zero.

The error code, -1, is returned if the address pointed to by $\underline{s1}$ is zero or if the length of s2 is odd.

As the string $\underline{s1}$ is processed every character that is translated increments the translation count which is the value returned by the function.

LIBRARY

/lib/lib3.a