**1. Read a string from a file. Count the number of characters in a given string without making use of the string library function. Use ‘for loop’. Get the input using ‘fscanf’. Use functions and pass**

**string by reference.**

**======================================================================**

**DESCRIPTION**

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* Program to read the number of characters present in a string from the file
* The string is present in the file and file is accessed using the FILE pointer in c, file can be opened in any mode read mode , write mode , append mode etc...
* The file is opened using FILE pointer in read mode and the string is read using the fscanf() function.

Syntax :

int fscanf(FILE \*stream,const char\*format[,argument,...]);

stream ---> FILE pointer

format ---> format specifier

argument ---> variables to which the values need to be stored

* The fscanf() receives number of words present the particular line of the file as specified in the format specifier part of the syntax.
* The string present in the file is then stored into the character array using the fscanf() function,

using loops the elements of the string is accessed.

* The loop is iterated until the string reaches the NULL character, the count variable is set to zero in the beginning, till the loop reaches the NULL character the count variable is incremented.
* character array is passed to the function by pass by reference method, in this method the character pointer is used to receive the character array to the function.
* During pass by reference method the address of the first character (0th index ) in the character array is passed from the function call.
* The character pointer used in the function definition ( \*str ) can be used as the character array , indexing is possible.
* The address operator ( & ) is used in the function call to send the address of the particular character.

// PROGRAM

#include<stdio.h>

void display(char \*str)

{

int i,count=0;

printf("\n input from the file is : ");

for(i=0;str[i]!='\0';i++)

{

printf("%c",str[i]);

count++;

}

printf("\n no of characters is :%d\n",count);

}

int main()

{

FILE \*fp=fopen("3.txt","r");

char string[10];

if(fp==NULL)

{

printf("\nsomething went wrong");

return 1;

}

if(fscanf(fp,"%s",string)==1)

//printf("%s",string);

display(&string[0]);

else

printf("\n not found ");

return 0;

}