

PROGRAM

```
#include<stdio.h>
#include<string.h>
#include<conio.h>
int main(){
    char S[50],S2[50],rev[50];
    int i,j,count=0,count2=0,equality=0,palin=0;
    clrscr();
    printf("Enter the string : ");
    gets(S);
    printf("Enter the string 2 from which you want to check equality : ");
    gets(S2);

    //lenght
    for(i=0; S[i]!='\0'; i++){
        count++;
    }
    printf("The length of the string is %d \n",count);
    //for S2
    for(i=0; S2[i]!='\0'; i++){
        count2++;
    }

    //reverse
    rev[count]='\0';
    j=0;
    for(i=count-1; i>=0; i--){
        rev[i] = S[j];
        j++;
    }
    printf("The reverse of the string is '%s' \n",rev);
    //Equality check
    for(i=0; S[i]!='\0' && S2[i]!='\0'; i++){
        if(S[i]==S2[i]){
            equality++;
        }
        else{break;}
    }
    if(equality==count && equality == count2){
        printf("The Strings are equal \n");
    }
    else{
        printf("The Strings are not equal \n");
    }
}
```

```
//palindrome
for(i=0; S[i]!='\0'; i++){
    if(S[i] == rev[i]){
        palin++;
    }
}
if(palin==count){
    printf("Its a palindrome \n");
}
else{
    printf("Not a palindrome \n");
}
getch();
return 0;
}
```

OUTPUT

```
Enter the string : level
Enter the string 2 from which you want to check equality : c programing
The length of the string is 5
The reverse of the string is 'level'
The Strings are not equal
Its a palindrome
PS C:\TURBOC3\BIN\PROJECT\Assignment> █
```