

1) C Program to Concatenate Two Strings

Enter first string: lol

Enter second string: :)

After concatenation: lol:)

Solution:

```
#include <stdio.h>
int main(){
    char s1[100], s2[100], i, j;
    printf("Enter first string: ");
    scanf("%s", s1);
    printf("Enter second string: ");
    scanf("%s", s2);
    // calculate the length of string s1
    // and store it in i
    for(i = 0; s1[i] != '\0'; ++i);
    for(j = 0; s2[j] != '\0'; ++j, ++i){
        s1[i] = s2[j];
    }
    s1[i] = '\0';
    printf("After concatenation: %s", s1);
    return 0;
}
```

2) C Program to Remove all Characters in a String Except Alphabet

Enter a string: p2'r-o@gram84iz./

Output String: programiz

Solution:

```
#include<stdio.h>
int main(){
    char line[150];
    int i, j;
    printf("Enter a string: ");
    gets(line);
    for(i = 0; line[i] != '\0'; ++i){
        while (!( (line[i] >= 'a' && line[i] <= 'z') || (line[i] >= 'A'
&& line[i] <= 'Z') || line[i] == '\0') ){
            for(j = i; line[j] != '\0'; ++j){
                line[j] = line[j+1];
            }
            line[j] = '\0';
        }
    }
    printf("Output String: ");
    puts(line);
    return 0;
}
```

3) C Program to Count the Number of Vowels, Consonants and so on

Enter a line of string: adfslkj34 34lkj343 34lk

Vowels: 1

Consonants: 11

Digits: 9

White spaces: 2

Solution:

```
#include <stdio.h>
int main(){
    char line[150];
    int i, vowels, consonants, digits, spaces;
    vowels = consonants = digits = spaces = 0;
    printf("Enter a line of string: ");
    scanf("%[^\n]", line);
    for(i=0; line[i]!='\0'; ++i){
        if(line[i]=='a' || line[i]=='e' || line[i]=='i' ||
            line[i]=='o' || line[i]=='u' || line[i]=='A' ||
            line[i]=='E' || line[i]=='I' || line[i]=='O' ||
            line[i]=='U'){
            ++vowels;
        }
        else if((line[i]>='a'&& line[i]<='z') || (line[i]>='A'&&
line[i]<='Z')){
            ++consonants;
        }
        else if(line[i]>='0' && line[i]<='9'){
            ++digits;
        }
    }
}
```

```
    else if (line[i]==' '){
        ++spaces;
    }
}
printf("Vowels: %d",vowels);
printf("\nConsonants: %d",consonants);
printf("\nDigits: %d",digits);
printf("\nWhite spaces: %d", spaces);
return 0;
}
```

4) C Program to Sort Strings in Dictionary Order

Enter 10 words:

C
C++
Java
PHP
Python
Perl
Ruby
R
JavaScript
PHP

In lexicographical order:

C
C++
Java
JavaScript
PHP
PHP
Perl
Python
R
Ruby

ÇÖZÜM:

```
#include<stdio.h>
#include <string.h>
int main(){
    int i, j;
    char str[10][50], temp[50];
    printf("Enter 10 words:\n");
    for(i=0; i<10; ++i)
        scanf("%s^\n",str[i]);
    for(i=0; i<9; ++i)
        for(j=i+1; j<10 ; ++j){
            if(strcmp(str[i], str[j])>0){
                strcpy(temp, str[i]);
                strcpy(str[i], str[j]);
                strcpy(str[j], temp);
            }
        }
}
```

```

        strcpy(str[j], temp);
    }
}
printf("\nIn lexicographical order: \n");
for(i=0; i<10; ++i){
    puts(str[i]);
}
return 0;
}

```

C - String functions

strlen - Finds out the length of a string

strlwr - It converts a string to lowercase

strupr - It converts a string to uppercase

strcat - It appends one string at the end of another

strncat - It appends first n characters of a string at the end of another.

strcpy - Use it for Copying a string into another

strncpy - It copies first n characters of one string into another

strcmp - It compares two strings

strncmp - It compares first n characters of two strings

strcmpi - It compares two strings without regard to case ("i" denotes that this function ignores case)

stricmp - It compares two strings without regard to case (identical to strcmpi)

strnicmp - It compares first n characters of two strings, Its not case sensitive

strdup - Used for Duplicating a string

strchr - Finds out first occurrence of a given character in a string

strrchr - Finds out last occurrence of a given character in a string

strstr - Finds first occurrence of a given string in another string

strset - It sets all characters of string to a given character

strnset - It sets first n characters of a string to a given character

strrev - It Reverses a string