

```

1 //Program to demonstrate string comparison using user defined function
2 #include <stdio.h>
3 #include<conio.h>
4 #include<string.h>
5 void main()
6 {
7     char s1[]="RAIPUR", s2[]="CHHATTISGARH";
8     int difference;
9     difference=my_strcmp(s1,s2);
10    if(difference==0)
11        printf("\ns=%s",s1,s2);
12    else if(difference>0)
13        printf("\ns>%s",s1,s2);
14    else
15        printf("\ns<%s",s1,s2);
16 }
17 int my_strcmp(char s1[],char s2[])
18 {
19     int i=0,j;
20     while(s1[i]==s2[i])
21     {
22         if((s1[i]=='\0')||(s2[i]=='\0'))
23             break;
24         i++;
25     }
26     return (s1[i]-s2[i]);
27 }
28

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Q4String_comarision.c: In function 'main':

Q4String_comarision.c:9:16: warning: implicit declaration of function 'my_strcmp' [-Wimplicit-function-declaration]

```

    difference=my_strcmp(s1,s2);
                ^~~~~~

```

RAIPUR>CHHATTISGARH

```
1
2 //Program to read and display a string with white spaces
3 #include <stdio.h>
4
5 void main()
6 {
7     char str[20];
8     printf("Enter any string");
9     gets(str);
10    printf("\n The entered string is:");
11    puts(str);
12 }
13
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

+ FullyQualifiedErrorId : CommandNotFoundException

```
PS G:\C\Assignment4> cd "g:\C\Assignmen4\" ; if ($?) { gcc Q1String_WhiteSpace.c -o Q1String_WhiteSpace } ; if ($?) { .\Q1String_WhiteSpace }
Enter any stringHello people
```

The entered string is:Hello people

```
1 //Program to read and display a character
2 #include<stdio.h>
3 #include<string.h>
4 void main()
5 {
6     char ch1,ch2;
7     printf("Enter any Charecter");
8     ch1=getchar();
9     printf("\n The Charecter is : ");
10    putchar(ch1);
11 }
12
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

The entered string is:Hello people

PS G:\C\Assignmen4'> cd "g:\C\Assignmen4\" ; if (\$?) { gcc Q2Read_Display_char.c -o Q2Read_Display_char } ; if (\$?) { .\Q2Read_Display_char }
Enter any CharecterIIInaya

The Charecter is : I

```

1 // Concatenation of two strings
2 #include <stdio.h>
3 #include <conio.h>
4
5 void main()
6 {
7     char s1[]="RAIPUR", s2[]="CHHATTISGARH";
8     printf("\nBefore Concatenation S1=%s S2=%s",s1,s2);
9     my_strcat(s1,s2);
10    printf("\nConcatenated String=%s",s1);
11 }
12
13 void my_strcat(char s1[],char s2[])
14 {
15     int i=0,j;
16     while(s1[i]!='\0')
17         i++;
18
19     j=0;
20     while(s2[j]!='\0')
21     {
22         s1[i++]=s2[j++];
23     }
24     s1[i++]='\0';
25 }
26

```

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Q3Concatenation_String.c:9:5: note: previous implicit declaration of 'my_strcat' was here
my_strcat(s1,s2);
^~~~~~

Before Concatenation S1=RAIPUR S2=CHHATTISGARH
Concatenated String=RAIPURCHHATTISGARH

C > Assignmen4' > C Q5String_comparison_n_char.c > main()

```
1 //Program to demonstrate string comparison for n characters
2 #include <stdio.h>
3 #include<string.h>
4
5 void main()
6 {
7     char str[10]="strange";
8
9
10    if(strncmp(&str[2],"ran",3)==0)
11        printf("\nThe string ran is found in positin 2");
12    else
13        printf("\nThe string ran is not found");
14 }
15
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS G:\C\Assignmen4'> cd "g:\C\Assignmen4\'" ; if (\$?) { gcc Q5String_comparison_n_char.c -o Q5S

The string ran is not found

PS G:\C\Assignmen4'> cd "g:\C\Assignmen4\'" ; if (\$?) { gcc Q5String_comparison_n_char.c -o Q5S

```
C > Assignmen4' > C Q7Palindrome_functionDefine.c > s1
1 //Program to check a string is palindrome or not using user defined function
2 #include <stdio.h>
3 #include<string.h>
4 void my_strrev(char[],char[]);
5 char s1[]="NITIN";
6 char d1[10];
7 int i, f=1;
8 void main()
9 {
10     printf("String =%s",s1);
11     my_strrev(s1,d1);
12     printf("\nReversed String =%s",d1);
13     printf("\n");
14     i=0;
15     while(s1[i]!='\0')
16     {
17         if(s1[i]!=d1[i])
18         {
19             printf("Not Polindrome");
20             f=0;
21             break;
22         }
23         i++;
24     }
25     if(f==1)
26         printf("The string is Polindrome");
27 }
28 void my_strrev(char s1[],char d1[10])
29 {
30     int i,n;
31     n=strlen(s1);
32     for(i=0;i<n;i++)
33     {
34         d1[n-1-i]=s1[i];
35     }
36     d1[i]='\0';
37 }
```


C > Assignmen4' > C Q8Count_vowel_Consonat.c > ...

```
1 //Program to count vowels and consonants in a string
2 #include <stdio.h>
3 #include<string.h>
4 #include<ctype.h>
5 void main()
6 {
7     char str[40],ch;
8     int i,vowel_count,con_count;
9     printf("Enter a sentence");
10    gets(str);
11    vowel_count=con_count=0;
12    for(i=0;i<strlen(str);i++)
13    {
14        if(isalpha(str[i]))
15        {
16            ch=tolower(str[i]);
17            if(ch=='a' || ch=='e' || ch=='i' || ch=='o' || ch=='u')
18                vowel_count++;
19            else
20                con_count++;
21        }
22    }
23    printf("\nvowels=%d \n consonants=%d",vowel_count,con_count);
24 }
25
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

The string is Polindrome

PS G:\C\Assignmen4'> cd "g:\C\Assignmen4\" ; if (\$?) { gcc Q8Count_vowel_Consonat.c -o Q8Co

Enter a sentenceassignment

vowels=3

consonants=7

C > Assignmen4' > C Q9Upper_TO_Lower.c > ...

```
1 //Program to convert lower to upper case and vice versa
2 #include <stdio.h>
3 #include <string.h>
4
5 int main() {
6     char s[100];
7     int i;
8     printf("\nEnter a string : ");
9     gets(s);
10
11     for (i = 0; s[i]!='\0'; i++) {
12         if(s[i] >= 'a' && s[i] <= 'z')
13             s[i] = s[i] - 32;
14         else if(s[i] >= 'A' && s[i] <= 'Z')
15             s[i] = s[i] + 32;
16     }
17     printf("\nString in Upper Case = %s", s);
18     return 0;
19 }
20
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

consonants=7

PS G:\C\Assignmen4'> cd "g:\C\Assignmen4\" ; if (\$?) { gcc Q9Upper_TO_Lower.c -o Q9Upper_1

Enter a string : hLlO

C > Assignmen4' > C Q10Count_Digits_whiteSpace_Otherchar.c > ...

```
1 //Program to count number of digits, white spaces and other characters
2 #include <stdio.h>
3 #include<string.h>
4
5 void main()
6 {
7     char str[30],ch;
8     int i,nwhite=0,ndigits=0,nothers=0;
9     while((ch=getchar())!='\n')
10    {
11        switch(ch)
12        {
13            case '0' :
14            case '1' :
15            case '2' :
16            case '3' :
17            case '4' :
18            case '5' :
19            case '6' :
20            case '7' :
21            case '8' :
22            case '9' :
23                ndigits++;
24                break;
25            case ' ':
26            case '\t':
27            case '\n': nwhite++;
28                break;
29            default:
30                nothers++;
31        }
32    }
33    printf("Numbers of \ndigits =%d\nWhite spaces=%d \n other characters =%d",ndigits,nwhite,nothers);
34 }
35
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

Enter a string : hLlO

String in Upper Case = Hl1O

C > Assignmen4' > C Q11Replace_Character.c > main()

```
1 //Program to repalce a character with next character (a->b,b->c,...)
2 #include <stdio.h>
3 #include<string.h>
4 #include<ctype.h>
5
6 void main()
7 {
8     char str[30];
9     int i;
10    printf("Enter the sentence");
11    scanf("%s",str);
12    for(i=0;i<strlen(str);i++)
13    {
14        str[i]++;
15    }
16    printf("The output string is =%s",str);
17 }
18
19
20
21
22
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS G:\C\Assignmen4'> cd "g:\C\Assignmen4'\\" ; if ($?) { gcc Q11Replace_Character.c -o Q11Replace_Character
Enter the sentencebhavesh
The output string is =cibwfti
PS G:\C\Assignmen4'> cd "g:\C\Assignmen4'\\" ; if ($?) { gcc Q11Replace_Character.c -o Q11Replace_Character
Enter the sentenceraipur
The output string is =sbjqvs
PS G:\C\Assignmen4'> 
```

```
C > Assignmen4' > C Q12Length_String.c > main()
1 //Program to find length of a string
2 #include <stdio.h>
3 #include<string.h>
4
5 int mystrlen(char str[])
6 {
7     int c=0;
8     while(str[c]!='\0')
9         c++;
10    return c;
11 }
12
13 void main()
14 {
15     char str[]="Chhattisgarh raipur";
16     printf("The length of the string is %d ", mystrlen(str));
17     printf("Built in value is: %d", strlen(str));
18 }
19
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

The length of the string is 16 Built in value is: 16

PS G:\C\Assignmen4'> cd "g:\C\Assignmen4'\ " ; if (\$?) { gcc Q12Length_String.c

The length of the string is 19 Built in value is: 19

PS G:\C\Assignmen4'> █

```
C > Assignmen4' > C Q13DefineFunction_copy_string.c > main()
1  /* User defined function to copy a string*/
2  #include <stdio.h>
3  #include<string.h>
4
5  void mystrcpy(char dstr[], char sstr[])
6  {
7      int c=0;
8      while(sstr[c]!='\0')
9      {
10         dstr[c]=sstr[c];
11         c++;
12     }
13     dstr[c]='\0';
14 }
15
16 void main()
17 {
18     char sstr[]="IIIT Naya Raipur";
19     char dstr[20];
20     mystrcpy(dstr, sstr);
21     printf("The copied string is %s ", dstr);
22 }
23
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS G:\C\Assignmen4'> cd "g:\C\Assignmen4\' " ; if ($?) { gcc Q13DefineFunction_copy_string.c
The copied string is IIIT Naya Raipur
PS G:\C\Assignmen4'> █
```