

Course Name: O Level (2nd Sem B2 and B3 Batch)
Topic: Problem on String

Subject: C Language
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Example 1: Program to count the number of words in any string.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,w=0;
    char x[50];
    clrscr();
    printf("\nEnter any string");
    gets(x);
    for(i=0;x[i]!='\0';i++)
    {
        if(x[i]==32 && x[i+1]!='32)
            w++;
    }
    printf("\nNo.of words in a string %d",++w);
    getch();
}
```

To count the no. of words in given string count the no. of space in string 32 is ASCII value of space.

Output:

```
Enter any string Today is Wednesday
No.of words in a string 3
```

Example 2: Write a program to copy one string into another string in reverse order then print it.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,j;
    char x[50],y[50];
    clrscr();
    printf("\nEnter any string ");
    gets(x);
    for(i=0;x[i]!='\0';i++);
    for(j=0,--i;i>=0;i--,j++)
    {
        y[j]=x[i];
    }
    y[j]='\0';
    printf("\nAfter Copy in Reverse Order\n");
    puts(y);
    getch();
}
```

Output:

```
Enter any string amit kumar
After Copy in Reverse Order
ramuk tima
```

Example 3: Write a program to check any string is palindrome or not.

```
#include<stdio.h>
#include<conio.h>
void main()
{
    int i,j;
    char x[50];
    clrscr();
    printf("\nEnter any string ");
    gets(x);
    for(i=0;x[i]!='\0';i++);
    for(j=0,--i;i>=0;i--,j++)
    {
        if(x[i]!=x[j])
        {
            printf("\nString is not Polindrome");
            getch();
            exit(0);
        }
    }
    printf("\nString is Polindrome");
    getch();
}
```

Output:

```
Enter any string :nitin
String is Polindrome
```

```
Enter any string :amit
String is not Polindrome_
```

Example 4: Write a program to insert any character in given string at any specified position.

```
#include<stdio.h>
#include<conio.h>
main()
{
    char x[25],c;
    int i,j,l;
    clrscr();
    printf("enter any string");
    gets(x);
    printf("\nEnter the position where you want to insert");
    scanf("%d",&j);
    fflush(stdin);
    printf("\nEnter the character");
    scanf("%c",&c);
    l=strlen(x);
    for(i=l;i>=j-1;i--)
```

strlen() is a library function of string to is used to find the length of string

```

x[i+1]=x[i];
x[j-1]=c;
puts(x);
getch();
}

```

Output:

```

Enter any string : amit kmar

Enter the position where you want to insert : 7

Enter the character to be insert :u
amit kumar
_

```

Example 5: Write a program to concatenate any two strings.

Note: **Concatenation**, is the operation of joining two strings together.
The term "concatenation" literally means to merge two things together.

```

#include<stdio.h>
#include<conio.h>
void main()
{
char s1[100], s2[100];
int i,j;
clrscr();
printf("\nEnter first string: ");
gets(s1);
printf("\nEnter second string: ");
gets(s2);
for(i=0;s1[i]!='\0';++i);
for(j=0;s2[j]!='\0';++j,++i)
{
s1[i]=s2[j];
}
s1[i]='\0';
printf("\nAfter concatenation: %s",s1);
getch();
}

```

i contains length of string s1

Output:

```

Enter first string: amit

Enter second string: kumar

After concatenation: amitkumar_

```

Example 6: Write a program to count the number of vowel, consonant, digit and space in given strings.

```

#include<stdio.h>
#include<conio.h>
void main()
{
char x[150];

```

```

int i,v,c,d,s;
clrscr();
v=c=d=s=0;
printf("\nEnter any string: ");
gets(x);
for(i=0;x[i]!='\0';i++)
{
    if(x[i]=='a'||x[i]=='e'||x[i]=='i'||x[i]=='o'||x[i]=='u')
        ++v;
    if(x[i]!='a'&& x[i]!='e'&& x[i]!='i'&& x[i]!='o'&& x[i]!='u'&& x[i]!='32')
        ++c;
    if(x[i]>=48 && x[i]<=57)
        ++d;
    if(x[i]=='32')
        ++s;
}
printf("\nVowels: %d",v);
printf("\nConsonants: %d",c);
printf("\nDigits: %d",d);
printf("\nWhite spaces: %d",s);
getch();
}

```

Output:

```

Enter any string: Wednesday 27 may 2020
Vowels: 4
Consonants: 14
Digits: 6
White spaces: 3

```