C : Assignment on String

1.Write a C program to accept string with multiple spaces from user and print as it is.

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0;
	char str[100];

	printf("Please enter a String\n");
	fgets(str,sizeof(str), stdin);
	printf("\nGiven string is \n%s",str);



	getch();
}
```

##

2.Write a C program to accept string with multiple spaces from

user and print it with a sinlge space as

a delimiter.

Eg:

Input String:

_____India_____is_my_____country_____

Output String:

India_is_my_country (Consider _ as space)

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,j=0;
	char str[100];

	printf("Please enter a String\n");
	fgets(str,sizeof(str), stdin);
	printf("\nGiven string is \n%s",str);

	while(str[i]!='\n')
	{
		while(str[i]==' ' && str[i]!='\n')
		{
			i++;
```

```
        }

        while(str[i]!=' '&& str[i]!='\n')
        {
                printf("%c",str[i]);
                if(str[i+1]==' ')
                {

                        j=i+1;
                        while(str[j]!='\n')
                        {
                                if(str[j]!=' ')
                                {
                                        printf(" ");
                                        break;
                                }
                                j++;
                        }

                }
                i++;
        }
}
```

```
        getch();
}
```

##

3.Write a C program to print count of number characters in

given string.

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,count=0;
        char str[100];

        printf("Please enter a String\n");
        fgets(str,sizeof(str), stdin);
        printf("\nGiven string is \n%s",str);

        while(str[i]!='\n')
        {
                if(str[i]>='A' && str[i]<='z')
                {
                        count++;
                }
```

```
            i++;
        }
        printf("\nNumber of Characters = %d",count);

        getch();
}
```

##

4.Write a C program to accept string and print it in the reverse order.

Eg:

Input String: India is my country

Output String: yrtnuoc ym si aidnI

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0,count=0;
        char str[100];

        printf("Please enter a String\n");
        fgets(str,sizeof(str), stdin);
        printf("\nGiven string is \n%s",str);
```

```
printf("\nReverse string is\n");
while(str[i]!='\n')
{
        i++;
}
i--;
while(i>=0)
{
        while(str[i]==' '&&i>=0)
        {
                i--;
        }
        while(str[i]!=' ' && i>=0)
        {
                printf("%c", str[i]);
                if(str[i-1]==' ')
                {
                        count=0;
                        j=i-1;
                        while(j>=0)
                        {
                                if(str[j]!=' ')
                                {
                                        count++;
```

```
                                        break;
                                }
                                j--;
                        }
                        if(count>0)
                        {
                                printf(" ");
                        }
                }
                i--;
        }
    }

    getch();
}
```

##

5.Write a C program to count count of number of vowels and

number of consonants in the given string.

```
#include<stdio.h>
#include<conio.h>

void main()
{
    int i=0,consonat=0,vowels=0;
```

```
	char str[100];


	printf("Please enter a String\n");
	fgets(str,sizeof(str), stdin);
	printf("\nGiven string is \n%s",str);


	while(str[i]!='\n')
	{

	if(str[i]=='a'||str[i]=='e'||str[i]=='i'||str[i]=='o'||str[i]=='u'||str[i]=='A'||str[
i]=='E'||str[i]=='I'||str[i]=='O'||str[i]=='U')
		{
			vowels++;
			i++;
		}
		else
if((str[i]!='a'||str[i]!='e'||str[i]!='i'||str[i]!='o'||str[i]!='u'||str[i]!='A'||str[i]!='E'||
str[i]!='I'||str[i]!='O'||str[i]!='U')&&(str[i]<='z'&&str[i]>='A'))
		{
			consonat++;
			i++;
		}
		else i++;
	}


	printf("\nConsonants = %d\nVowels = %d\n",consonat,vowels);
```

```
        getch();
}
```

##

6.Write a C program to reverse a given string as below.

Eg:

Input String: India is my country

Output String: aidnI si ym yrtnuoc

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0,count=0,count1=0;
        char str[100];

        printf("Please enter a String\n");
        fgets(str,sizeof(str),stdin);
        printf("\nGiven string is \n%s",str);

        //to reverse words in sentence
        while(str[i]!='\n')
        {
```

```
while(str[i]==' '&&str[i]!='\n')
{
        i++;
}

count=0;
while(str[i]!=' ' && str[i]!='\n')
{
        count++;
        i++;
}
j=i-1;
while(str[j]!=' '||j==0)
{
        printf("%c",str[j]);
        j--;
}
if(str[i]==' ')
{
        count1=0;
        j=i;
        while(str[j]!='\n')
        {
                if(str[j]!=' ')
```

```
                        {
                                count1=1;
                                break;
                        }
                        j++;
                }
        }
        if(count1==1)
        {
                printf(" ");
        }
    }


    getch();
}
```

##

7.Write a C program to replace space with ‘$’ in given string.

Eg:

Input String: India is my country

Output String: Indiaismy$coutry

```
#include<stdio.h>
#include<conio.h>
```

```
void main()
{
	int i=0,j=0,count=0;
	char str[100];

	printf("Please enter a String\n");
	fgets(str,sizeof(str), stdin);
	printf("\nGiven string is \n%s",str);

	while(str[i]!='\n')
	{
		while(str[i]==' ' && str[i]!='\n')
		{
			i++;
		}

		while(str[i]!=' '&& str[i]!='\n')
		{
			printf("%c",str[i]);
			if(str[i+1]==' ')
			{
				count=0;
				j=i+1;
				while(str[j]!='\n')
```

```
                        {
                                if(str[j]!=' ')
                                {
                                        count++;
                                        break;
                                }
                                j++;
                        }
                        if(count>0)
                        {
                                printf("$");
                        }
                }
                i++;
        }
}


getch();
}
```

##

8.Write a program which accept sentence from user and print

number of words from that sentence.

Input String: India_is_my_country

Output: 4

Input String:

_____India_____is____my____country____

(Consider _ as space)

Output: 4

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,count1=0,count=0;
	char str[100];

	printf("Please enter a String\n");
	fgets(str,sizeof(str), stdin);
	printf("\nGiven string is \n%s",str);

	while(str[i]!='\n')
	{
		while(str[i]==' ' && str[i]!='\n')
		{
			i++;
		}
		count=0;
```

```
            while(str[i]!=' '&& str[i]!='\n')
            {
                  count++;
                  i++;
            }
            if(count>0)
            {
                  count1++;
            }
      }
      printf("\nNumber of Words = %d",count1);



      getch();
}
```

##

9.Write a C program to replace Good names in mail.

Eg:

Raw String: Hello GoodName

Input String: India

Output String: Hello India

Input String: Sangamner

Output String: Hello Sangamner

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,j=0,count=0;
	char str1[100];
	char str[100] = "Hello GoodName";

	printf("Please enter a String to be replaced\n");
	fgets(str1,sizeof(str1), stdin);
	printf("\nGiven string is \n%s",str1);

	while(str[i]!=' ')
	{
		i++;
	}
	i++;
	while(str1[j]!='\n')
	{
		str[i]=str1[j];
		j++;
		i++;
	}
```

```
        str[i]='\0';

        printf("Required String is \n%s",str);




        getch();
}
```

##

10.Write a C program to print all fibonacci series upto each

ASCII code of aphabates in given string.

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,a,b,c;
        char str[100];

        fgets(str,sizeof(str), stdin);
        printf("\nGiven string is \n%s",str);
```

```
	printf("\nFibonacci serie are as follows\n");
	while(str[i]!='\n')
	{
		a=0;
		b=1;
		c=a+b;
		printf("%d %d",a,b);
		while(c<=str[i])
		{
			a = b;
			b = c;
			c = a+b;
			printf(" %d",c);
		}
		i++;
		printf("\n");
	}




	getch();
}
```

##

11.Write a C program which accepts a string from user which contains a characters from ‘b’ to ‘y’.

Eg:

Input String: mn jn kn kazfd

Output String: mn jn kn k

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,j=0;
	char str[100];

	printf("Please enter a String\n");
	fgets(str,sizeof(str),stdin);
	printf("\nGiven string is \n%s",str);

	while(str[i]!='\n')
	{
		while(str[i]==' '&&str[i]!='\n')
		{
			i++;
		}
		while(str[i]!=' '&&str[i]!='\n')
```

```
        {
                if(str[i]>'b' && str[i]<'z')
                {
                        printf("%c",str[i]);
                }
                i++;
        }
        if(str[i]==' ')
        {
                j=i;
                while(str[j]!='\n')
                {
                        if(str[j]!=' ')
                        {
                                printf(" ");
                                break;
                        }
                        j++;
                }
        }
}


getch();
```

```
}
```

##

12.Write a C program which accept sentence from user and

print number of small letters, capital

letters, Spaces and digits from that sentence.

Eg:

Input String: abcDE 5Glm1 O

Output String: Small: 5 Capital: 4 Digits: 2 Spaces: 2

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,small=0,capital=0,digit=0,spaces=0;
	char str[100];

	printf("Please enter a String\n");
	fgets(str,sizeof(str), stdin);
	printf("\nGiven string is \n%s",str);

	while(str[i]!='\n')
	{
		if(str[i]<='z' && str[i]>='a')
		{
```

```
                small++;
                i++;
            }
            else if(str[i]>='A' && str[i]<='Z')
            {
                capital++;
                i++;
            }
            else if(str[i]>='0' && str[i]<='9')
            {
                digit++;
                i++;
            }
            else if(str[i]==' ')
            {
                spaces++;
                i++;
            }
            else i++;
        }

        printf("\nNumber of Small letters = %d\nNumber of Capital letters =
%d\nNumber of Digit letters = %d\nNumber of Spaces letters =
%d",small,capital,digit,spaces);
```

```
        getch();
}
```

##

13.Write a C program which accept sentence from user and

print number of white spaces from that

sentence.

Eg:

Input String: India is my country

Output: 3

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,count=0;
        char str[100];

        printf("Please enter a String\n");
        fgets(str,sizeof(str), stdin);
        printf("\nGiven string is \n%s",str);

        while(str[i]!='\n')
        {
                if(str[i]==' ')
```

```
            {
                count++;
            }
            i++;
        }
        printf("\nNumber of spaces = %d",count);



        getch();
}
```

##

14.Write a C program which accept sentence from user and

print number of words of even and odd

length from that sentence.

Eg:

Input String: India is my country. I love my country.

Output : Even: 5 Odd: 2

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,count=0,even=0,odd=0;
```

```
char str[100];

printf("Please enter a String\n");
fgets(str,sizeof(str), stdin);
printf("\nGiven string is \n%s",str);

while(str[i]!='\n')
{
        while(str[i]== ' ' && str[i]!='\n')
        {
                i++;
        }

        count=0;
        while(str[i]!=' ' && str[i]!='\n')
        {
                count++;
                i++;
        }
        if(count%2==0) even++;
        else odd++;
}

printf("\nEven length words = %d\nOdd length words= %d",even,odd);
```

```
        getch();
}
```

##

15.Write a C program which accept sentence from user and

print last word from that sentence.

Eg:

Input String: India is my country

Output String: country

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0,k=0,index=0;
        char str[100];

        printf("Please enter a String\n");
        fgets(str,sizeof(str), stdin);
        printf("\nGiven string is \n%s",str);

        printf("\nLast word is \n");
        while(str[i]!='\n')
        {
```

```
        while(str[i]== ' ' && str[i]!='\n')
        {
                i++;
        }

        while(str[i]!=' ' && str[i]!='\n')
        {
                index=i;
                i++;
        }

}
j=index;
        while(str[j]!=' '&&j>=0)
        {
                j--;
        }
        j++;
        for(k=j; k<=index; k++)
        {
                printf("%c",str[k]);
        }

getch();
```

```
}
```

##

16.Write a C program which accept sentence from user and
position from user and print the word at
that position.

Eg:

Input String: India is my country

Input Position: 3

Output String: my

```
#include<stdio.h>
#include<conio.h>

void main()
{
        char str[100];
        int i=0,j=0,k=0,count=0;
        int n;

        printf("Please enter a String\n");
        fgets(str,sizeof(str),stdin);
        printf("\nGiven String is \n%s",str);

        printf("\nEnter Position of word to print\n");
        scanf("%d", &n);
```

```
while(str[i]!='\n')
{
		while(str[i]==' ' && str[i]!='\n')
		{
			i++;
		}
		j=i;
		while(str[i]!=' '&&str[i]!='\n')
		{
			i++;
		}
		count++;
		if(count == n)
		{
			for(k=j; k<i; k++)
			{
				printf("%c", str[k]);
			}
		}
}
```

```
        getch();
}
```

##

17.Write a C program to convert the string from upper case

to lower case.

Eg:

Input String: India Is My Country

Output String: india is my country

```
#include<stdio.h>
#include<conio.h>

void main()
{
        char str[100];
        int i=0;

        printf("Please enter a string\n");
        fgets(str,sizeof(str),stdin);
        printf("\nGiven String is\n%s",str);



        while(str[i]!='\n')
        {
                if(str[i]>='A' && str[i]<='Z')
```

```
                {
                        str[i]=str[i]+32;
                }
                i++;
        }

        printf("\nRequired string is\n%s", str);



        getch();
}
```

##

18.Write a C program which toggles the case of a string.

Eg:

Input String: technOrbit Infosystems

Output String: TECHNoRBIT iNFOSYSTEMS

```
#include<stdio.h>
#include<conio.h>


void main()
{
        int i=0;
```

```
	char str[100];



	printf("Please enter a String\n");
	fgets(str,sizeof(str),stdin);
	printf("\nGiven string is \n%s",str);

	while(str[i]!='\n')
	{
		if(str[i]>='A' && str[i]<='Z')
		{
			str[i]=str[i]+32;
		}
		else if(str[i]>='a' && str[i]<='z')
		{
			str[i]=str[i]-32;
		}
		i++;

	}
	printf("\nRequired string is\n%s",str);

	getch();
}
```

##

19.Write a C program to check whether given strings are

Anagram strings or not.

Eg:

Input String1: abccd

Input String2: cbcda

Output String: Strings are anagram

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,j=0,count1=0,count2=0,temp,flag=0;
	char str[100],str1[100];

	printf("Enter given strings\n");
	fgets(str,sizeof(str),stdin);
	fgets(str1,sizeof(str1),stdin);

	printf("\nGiven strings are \n%s & \n%s",str,str1);


	while(str[i]!='\n')
	{
```

```
        count1++;
        i++;
}
while(str1[j]!='\n')
{
        count2++;
        j++;
}


if(count1==count2)
{
        i=0;
        j=0;
        while(i<count1)
        {
                j=i+1;
                while(j<count1)
                {
                        if(str[j]<=str[i])
                        {
                                temp = str[j];
                                str[j] = str[i];
                                str[i] = temp;
```

```
                }
                j++;
        }
        i++;
}
i=0;
j=0;
while(i<count1)
{
        j=i+1;
        while(j<count1)
        {
                if(str1[j]<=str1[i])
                {
                        temp = str1[j];
                        str1[j] = str1[i];
                        str1[i] = temp;
                }
                j++;
        }
        i++;
}
i=0;
j=0;
```

```
        while(str[i]!='\n')
        {
                if(str[i]==str1[j])
                {
                        i++;
                        j++;
                }
                else
                {
                        flag=1;
                        break;
                }
        }
        if(flag==0)
        {
                printf("\nGiven strings are Anagram");
        }
        else printf("\nGiven strings are not Anagram");
}

else
{
        printf("\nGiven strings are not angram\n");
```

```
        }


        getch();
}
```

##

20.Write a C program which accept string from user and copy

that string into some another string.

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0;
        char str[100];
        char str1[100];

        printf("Enter a String\n");
        fgets(str,sizeof(str),stdin);

        printf("Given string is \n%s", str);

        while(str[i]!='\n')
        {
```

```
                        str1[j] = str[i];
                        j++;
                        i++;
        }
        str1[j] = '\0';

        printf("\nRequired string is\n%s", str1);

        getch();
}
```

##

21.Write a program which accept string from user and copy
first N charaters into some destination string.

Eg:

Input String: India is my country

Input of N: 8

Output String: India is

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0,n,count=0;
        char str[]="India is my country";
```

```
char str1[100];

printf("Given string is \n%s", str);
printf("\nEnter value of N \n");
scanf("%d", &n);

while(str[i]!='\n')
{
        if(count<n)
        {
                str1[j] = str[i];
                j++;
        }
        if(n<=j)
        {
                break;
        }
        i++;
        count++;
}
str1[j] = '\0';

printf("\nRequired string is\n%s", str1);
```

```
        getch();
}
```

##

22.Write a C program which accept string from user and
accept number N then copy last N character into some another
string.

Eg:

Input String: India is my country

Input of N: 5

Output String: is my

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0,n,count=0;
        char str[100];
        char str1[100];
        printf("Enter a string\n");
        fgets(str,sizeof(str),stdin);

        printf("Given string is \n%s", str);
        printf("\nEnter value of N \n");
        scanf("%d", &n);
```

```
while(str[i]!='\n')
{
        count++;
        i++;
}
i=count-n;
        if(i>=0)
        {

                while(i<=count)
                {
                        str1[j]=str[i];
                        i++;
                        j++;
                 }

                str1[j] = '\0';

str1[j]='\0';

printf("\nRequired string is\n%s", str1);

        }
```

```
                else printf("\nPlease enter valid input N\n");


        getch();
}
```

##

23.Write a C program which accept two strings from user and

append second string after first string.

Eg:

Input String: India Country

Output String: IndiaCountry

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0;
        char str[100],str1[100];

        printf("Please enter given String\n");
        fgets(str,sizeof(str),stdin);
        fgets(str1,sizeof(str1),stdin);
```

```
        printf("\nGiven strings are \n%s && \n%s",str,str1);

        while(str[i]!='\n')
        {
                i++;
        }
        i--;
        while(str1[j]!='\n')
        {
                str[i]=str1[j];
                i++;
                j++;
        }
        str[i]='\0';
        printf("\nRequired string is \n%s",str);


        getch();
}
```

##

24.Write a C program which accept two strings from user and

append N characters of second string

after first string.

Eg:

Input String: India Country

Input of N: 4

Output String: IndiaCoun

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,j=0,n;
	char str[100],str1[100];

	printf("Please enter given String\n");
	fgets(str,sizeof(str),stdin);
	fgets(str1,sizeof(str1),stdin);

	printf("\nGiven strings are \n%s && \n%s",str,str1);

	printf("\nPlease enter value of N\n");
	scanf("%d",&n);

	while(str[i]!='\n')
	{
		i++;
	}
```

```
        while(str1[j]!='\n')
        {
                if(j<n)
                {
                        str[i]=str1[j];
                        i++;
                }
                j++;
        }
        str[i]='\0';
        printf("\nRequired string is \n%s",str);



        getch();
}
```

##

25.Write a C program which accept two strings from user and
compare two strings. If both strings are equal then return 0
otherwise return difference between first mismatch character.

Eg:

Input String1: India is my country.

Input String2: India is my country.

Output: Both strings are equal.

```
#include<stdio.h>
```

```
#include<conio.h>

void main()
{
	int i=0,j=0,count1=0,count2=0;
	char str[100],str1[100];

	printf("Please enter given String\n");
	fgets(str,sizeof(str),stdin);
	fgets(str1,sizeof(str1),stdin);

	printf("\nGiven strings are \n%s && \n%s",str,str1);
	while(str[i]!='\n')
	{
		count1++;
		i++;
	}
	while(str1[j]!='\n')
	{
		count2++;
		j++;
	}
	i=0;
	j=0;
```

```
	while(str[i]!=0)
	{
		if(str[i]==str1[j])
		{
			i++;
			j++;
		}
		else
		{
			printf("\nStrings are not equal\nFirst Mismach Charactrs are
%c and %c\n",str[i],str1[j]);
			break;
		}
	}
	if(count1==i-1 && count2 == j-1)
	{
		printf("\nTwo Strings are equal");
	}




	getch();
}
```

##

26.Write a C program which accept two strings from user and

compare only first N characters of two strings. If both strings are equal till first N characters then return 0 otherwise return difference between first mismatch character.

Eg:

Input String1: Ramayan

Input String2: Ramanacharya

Input of N: 4

Output: Both strings are equal.

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,j=0,count1=0,count2=0,n;
	char str[100],str1[100];

	printf("Please enter given String\n");
	fgets(str,sizeof(str),stdin);
	fgets(str1,sizeof(str1),stdin);

	printf("\nGiven strings are \n%s && \n%s",str,str1);

	printf("\nEnter Value of N\n");
	scanf("%d", &n);
```

```
while(str[i]!='\n')
{
        count1++;
        i++;
}
while(str1[j]!='\n')
{
        count2++;
        j++;
}
i=0;
j=0;
while(str[i]!=0)
{
        if(i<n){
        if(str[i]==str1[j])
        {
                i++;
                j++;
        }
        else
        {
                printf("\nStrings are not equal\nFirst Mismach Charactrs are
%c and %c\n",str[i],str1[j]);
```

```
                    break;
                }
                }
                else break;
        }
        if(n==i)
        {
                printf("\nFirst %d characters of both strings are equal",n);
        }



        getch();
}
```

##

27.Write a C program which accept two strings from user and compare two strings without case sensitivity. If both strings are equal then return 0 otherwise return difference between first mismatch character.

Eg:

Input String1: india Is mY cOuntry

Input String2: INDIA is MY countrY

Output: Both strings are equal.

```
#include<stdio.h>
```

```
#include<conio.h>

void main()
{
	int i=0,j=0,count1=0,count2=0;
	char str[100],str1[100];

	printf("Please enter given String\n");
	fgets(str,sizeof(str),stdin);
	fgets(str1,sizeof(str1),stdin);

	printf("\nGiven strings are \n%s && \n%s",str,str1);
	while(str[i]!='\n')
	{
		count1++;
		i++;
	}
	while(str1[j]!='\n')
	{
		count2++;
		j++;
	}
	i=0;
	j=0;
```

```
	while(str[i]!=0)
	{
		if(str[i]==str1[j] || str[i]-32 == str1[j]||
str[i]+32==str1[j]||str[i]==str1[j]+32||str[i]==str1[j]-32)
		{
			i++;
			j++;
		}
		else
		{
			printf("\nStrings are not equal\nFirst Mismach Charactrs are
%c and %c\n",str[i],str1[j]);
			break;
		}
	}
	if(count1==i-1 && count2 == j-1)
	{
		printf("\nTwo Strings are equal");
	}




	getch();
}
```

##

28.Write a C program which accept string from user and then reverse the string till first N characters without taking another string.

Eg:

Input String: India is my country

Input of N: 8

Output : m si aidnIy country

```
#include<stdio.h>
#include<conio.h>

void main()
{
	int i=0,j=0,count=0,m=0,n=0,index,temp,flag=0;
	char str[100];

	printf("Please enter a String\n");
	fgets(str,sizeof(str),stdin);
	printf("\nGiven string is \n%s",str);

	printf("\nEnter value of N\n");

	scanf("%d",&n);
	while(str[i]==' ')
	{
```

```
        i++;
}
m=i;
i=0;

while(str[i]!='\n')
{
        while(str[i]==' ' && str[i] != '\n')
        {
                i++;
        }

        while(str[i]!=' '&&str[i]!='\n')
        {
                count++;
                i++;

                if(count>=n)
                {
                        n=count;
                        flag=1;
                        j=i;
                        break;
                }
```

```
        }
        if(count>=n) break;
}
if(flag==1)
{
while(m<=j)
{
        while(str[m]==' '&& (m<=j))
        {
                m++;
        }
        while(str[j] == ' '&& (m<=j))
        {
                j--;
        }
        while(m<=j)
        {
                temp = str[m];
                str[m] = str[j];
                str[j] = temp;
                m++;
                j--;
        }
```

```
        }
        }
        printf("\nRequired String is \n%s",str);

        getch();
}
```

##

29.Write a C program which accept string from user and then
accept range and reverse the string in that range without
taking another string.

Eg:

Input String: India is my country

Input of N1: 3

Input of N1: 9

Output String: Indm si aicountry

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,count=0,m,n,index,temp;
        char str[100];
```

```
printf("Please enter a String\n");
fgets(str,sizeof(str),stdin);
printf("\nGiven string is \n%s",str);

printf("\nEnter value ofM & N\n");
scanf("%d",&m);
scanf("%d",&n);

while(str[i]!='\n')
{
        while(str[i]==' ' && str[i] != '\n')
        {
                i++;
        }

        while(str[i]!=' '&&str[i]!='\n')
        {
                count++;
                i++;

                if(count==m)
                {
                        m = i-1;
                }
```

```
                if(count>=n)
                {
                        n=count;
                        break;
                }

        }
        if(count>=n) break;
}

while(m<=n)
{
        while(str[m]==' '&& (m<=n))
        {
                m++;
        }
        while(str[n] == ' '&& (m<=n))
        {
                n--;
        }
        while(m<=n)
        {
                temp = str[m];
                str[m] = str[n];
```

```
                str[n] = temp;
                m++;
                n--;
            }
        }
        printf("\nRequired String is \n%s",str);

        getch();
}
```

##

30.Write a C program which accept string from user and

reverse words from that string which are of even length.

Eg:

Input String: India is my country. I love my country.

Output String: India si ym .yrtnuoc I evol ym . Yrtnuoc

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,j=0,count=0,count1=0,index=0;
        char str[100];

        printf("Please enter a String\n");
```

```
fgets(str,sizeof(str),stdin);
printf("\nGiven string is \n%s",str);

//to reverse words in sentence
while(str[i]!='\n')
{
        while(str[i]==' '&&str[i]!='\n')
        {
                i++;
        }
        index=i;
        count=0;
        while(str[i]!=' ' && str[i]!='\n')
        {
                count++;
                i++;
        }
        if(count%2==0)
        {
                j=i-1;
                while(str[j]!=' '||j==0)
                {
                        printf("%c",str[j]);
                        j--;
```

```
        }
}
else
{
        j=index;
        while(str[j]!=' ' && str[j]!='\n')
        {
                printf("%c", str[j]);
                j++;
        }
}
if(str[i]==' ')
{
        count1=0;
        j=i;
        while(str[j]!='\n')
        {
                if(str[j]!=' ')
                {
                        count1=1;
                        break;
                }
                j++;
        }
```

```
            }
            if(count1==1)
            {
                  printf(" ");
            }
      }


      getch();
}
```

##

31.Write a C program which accept string from user and check

whether string is palindrome or not.

Eg:

Input String: level

Output String: String is palindrome.

```
#include<stdio.h>
#include<conio.h>

void main()
{
      int i=0,j=0,flag=0;
      char str[100];
```

```
printf("Enter a String\n");
fgets(str,sizeof(str),stdin);
printf("Given String is\n%s\n",str);

//to check Palindrome string
while(str[i]!='\n')
{
	i++;
}
i--;
while(i>=j)
{
	if(str[j]==str[i])
	{
		i--;
		j++;
	}
	else
	{
		flag=1;
		break;
	}
}
if(flag==0)
```

```
        {
                printf("Given String is Palindrome");
        }
        else printf("Given String is not Palindrome");

        getch();

}
```

##

32.Write a C program to count number of alphabates, spaces
and words in given string.

```
#include<stdio.h>
#include<conio.h>

void main()
{
        int i=0,count1=0,count=0,alphabates=0,spaces=0,digits=0;
        char str[100];

        printf("Please enter a String\n");
        fgets(str,sizeof(str), stdin);
        printf("\nGiven string is \n%s",str);

        while(str[i]!='\n')
```

```
{
        while(str[i]==' ' && str[i]!='\n')
        {
                spaces++;
                i++;
        }
        count=0;
        while(str[i]!=' '&& str[i]!='\n')
        {
                if(str[i]>='A' && str[i]<='z')
                {
                        alphabates++;
                }
                else if(str[i]<='9' && str[i]>='0')
                {
                        digits++;
                }
                count++;
                i++;
        }
        if(count>0)
        {
                count1++;
        }
```

```
        }
        printf("\nNumber of Words = %d\nNumber of Spaces = %d\nNumber of
Alphabates = %d\nNumber of Digits = %d",count1,spaces,alphabates,digits);



        getch();
}
```