

PROGRAM 26:

7.19.2019

STRING OPERATIONS

OBJECTIVE:

Write a C++ program to perform the following string operations using pointers according to the user's choice:

- a. To count the number of vowels in a string
- c. To compare two strings
- d. To copy one sting into another
- e. Exit

SOURCE CODE:

```
#include<iostream.h>

#include<conio.h>

#include<stdio.h>

void main()

{int ch;

char st[100], *ptr;

char s1[100], s2[100], *ptr1,*ptr2;

char s3[100], s4[100]="NULL", *ptr3,*ptr4;

int c=0;

int flag=0 ;

cout<<"++++++  
++++++"<<endl;
```

```
cout<<"\t\t\t\b STRING OPERATIONS: "<<endl;

cout<<"+++++
+++++"<<endl;

while(1)

{

cout<<"Choose from the following functions:\n1.To count the
number of vowels in a string\n2.To compare two strings\n3.To
copy one sting into another\n4. Exit"<<endl;

cout<<"\nEnter YOUR CHOICE: ";

cin>>ch;

switch(ch)

{ case 1:cout<<"Enter the string: ";

        gets(st);

        ptr=st;

        while(*ptr!='\0')

        {if(*ptr=='a' || *ptr=='e' || *ptr=='i' || *ptr=='o' || *ptr=='u' || *ptr=='A' ||
*ptr=='E' || *ptr=='I' || *ptr=='O' || *ptr=='U')

                c++;

        ptr++;

        }

        cout<<"\nThe number of vowels are:"<<c<<endl;

        cout<<"-----
-----"<<endl;
```

```
break;
```

```
case 2:
```

```
cout<<"Enter string 1: ";
```

```
gets(s1);
```

```
cout<<"\nEnter string 2: ";
```

```
gets(s2);
```

```
ptr1=s1;
```

```
ptr2=s2;
```

```
while(*ptr1!='\0'&& *ptr2!='\0')
```

```
{if(*ptr1!=*ptr2)
```

```
{flag=1;
```

```
}
```

```
ptr1++;
```

```
ptr2++;
```

```
}
```

```
if(flag==0)
```

```
cout<<"The strings are identical."<<endl;
```

```
else
```

```
cout<<"The strings are not identical"<<endl;
```

```
        cout<<"-----  
----- "<<endl;break;
```

```
case 3: cout<<"\nEnter string s1: ";
```

```
    gets(s3);
```

```
    ptr3=s3;
```

```
    ptr4=s4;
```

```
    while(*ptr3!='\0')
```

```
    {*ptr4=*ptr3;
```

```
      ptr3++;
```

```
      ptr4++;
```

```
    }
```

```
    cout<<"\nThe string s1 is copied into string s2.";
```

```
    cout<<"\nThe copied string (s2) is:"<<s4<<endl;
```

```
    cout<<"-----  
----- "<<endl;break;
```

```
default:cout<<"Enter valid option!!! ";
```

```
}
```

```
}
```

```
getch();}
```

SAMPLE OUTPUT:

```
C:\BC5\BIN\NONAME00.exe

*****
                        STRING OPERATIONS:
*****
Choose from the following functions:
1.To count the number of vowels in a string
2.To compare two strings
3.To copy one sting into another
4. Exit

ENTER YOUR CHOICE: 1
Enter the string: rithika is happy

The number of vowels are:5
-----
Choose from the following functions:
1.To count the number of vowels in a string
2.To compare two strings
3.To copy one sting into another
4. Exit

ENTER YOUR CHOICE: 2
Enter string 1: hi i am rithika

Enter string 2: hi i am rithika
The strings are identical.
-----
Choose from the following functions:
1.To count the number of vowels in a string
2.To compare two strings
3.To copy one sting into another
4. Exit

ENTER YOUR CHOICE: 2
Enter string 1: i am rithika

Enter string 2: i am alien
The strings are not identical
-----
```

```
C:\BC5\BIN\NONAME00.exe

*****
                        STRING OPERATIONS:
*****
Choose from the following functions:
1.To count the number of vowels in a string
2.To compare two strings
3.To copy one sting into another
4. Exit

ENTER YOUR CHOICE: 3

Enter string s1: rithika lives in UAE

The string s1 is copied into string s2.
The copied string <s2> is:rithika lives in UAE
-----
Choose from the following functions:
1.To count the number of vowels in a string
2.To compare two strings
3.To copy one sting into another
4. Exit

ENTER YOUR CHOICE: 4
```