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**ROLL NO:-SECOA115**

**ASSIGNMENT NO:-04**

**AIM** **:-** Write C++ program for string operations- copy, concatenate, check substring, equal,

Reverse and length.

**PROGRAM:-**

#include<iostream>

using namespace std;

int main()

{

char arr[30],s1[10],s2[10],s3[10],s4[10]="M AN ASI",s5[10]="MANASI@123";

int opt,i=0,j,len=0,count,count1,count2,count3,ch;

cout<<"Enter any option\n";

cout<<" 1 length of the string\n";

cout<<" 2 Concatenate of the two string\n";

cout<<" 3 Reverse of the string\n";

cout<<" 4 Copy of the string\n";

cout<<" 5 Compare of the string\n";

cout<<" 6 blank spaces of the string\n";

cout<<" 7 alphanumeric count of the string\n";

cout<<"Enter the choice\n";

cin>>opt;

do

{

switch(opt)

{

case 1:

cout<<"Enter any string \n";

cin>>arr;

for(i=0;arr[i]!='\0';i++);

cout<<"The length of the string "<<i;

break;

case 2:

cout<<" String Concatenation \n";

cout<<"\nEnter the First string:\n";

cin>>s1;

cout<<"\nEnter Second string";

cin>>s2;

for(i=0;s1[i]!='\0';i++)

{

s3[i]=s1[i];

}

s3[i]='\0';

for(j=0;j<=i;j++)

{

s3[i+j]=s2[j];

}

cout<<"The Concatenated string is "<<s3;

break;

case 3:

cout<<" Reverse the string ";

cout<<"\nEnter the string";

cin>>s1;

while(s1[i]!='\0')

{

len=len+1;

i++ ;

}

for(i=len-1;i>=0;i--)

{

cout<<s1[i];

}

break;

case 4:

cout<<" String copying \n";

cout<<"Enter 1st string :";

cin>>s1;

cout<<"Enter 2st string :";

cin>>s2;

while(s2[i]!='\0')

{

s1[i]=s2[i];

i++;

}

s1[i]='\0';

cout<<” Copied string 2 to 1=”<<s1;

break;

case 5:

cout<<" String compare \n";

cout<<"Enter 1st string :";

cin>>s1;

cout<<"Enter 2st string :";

cin>>s2;

if(s1[i]=s2[i])

cout<<"\nequal";

else if(s1[i]<s2[i])

cout<<"\ns1 is smaller";

else if(s1[i]>s2[i])

cout<<"\ns1 is bigger";

break;

case 6:

count=0;

for(i=0;s4[i]!='\0';i++)

       {

               if(s4[i]==' ')

                   count++;

       }

       cout<<"\n Total blank spaces in s4 string are:"<<count;

           break;

case 7:

count1=0;

count2=0;

count3=0;

cout<<"alphanumeric count of the string s5: \n";

           for(i=0;s5[i]!='\0';i++)

           {

               if(s5[i]>64 && s5[i]<92)

                   {count1++;}

                   else if(s5[i]>96 && s5[i]<124)

                       {count1++;}

                   else if(s5[i]>47 &&s5[i]<59)

                     {

count2++;

                     }

                    else

                    {

                       count3++;

                    }

           }

           cout<<"\n No of alphabets"<<count1;

           cout<<"\n No of numerical values"<<count2;

           cout<<"\n Special characters"<<count3;

            break;

default:

{

cout<<"Not is valid Option........";

}

}

                   cout<<"\n Do you wish to continue?(y/n)";

                   cin>>ch;

   }while(ch=='Y'||ch=='y');

 return 0;

}

**OUTPUT:-**

Enter any option

1 length of the string

2 Concatenate of the two string

3 Reverse of the string

4 Copy of the string

5 Compare of the string

6 blank spaces of the string

7 alphanumeric count of the string

Enter the choice

1

Enter any string

PCCOE

The length of the string 5

Do u want to continue?(1/0)

1

Enter any option

1 length of the string

2 Concatenate of the two string

3 Reverse of the string

4 Copy of the string

5 Compare of the string

6 blank spaces of the string

7 alphanumeric count of the string

Enter the choice

2

String Concatenation

Enter the First string:

PCCOE

Enter Second string:COLLEGE

The Concatenated string is PCCOECOLLEGE

Do u want to continue?(1/0)

1

Enter any option

1 length of the string

2 Concatenate of the two string

3 Reverse of the string

4 Copy of the string

5 Compare of the string

6 blank spaces of the string

7 alphanumeric count of the string

Enter the choice

3

Reverse the string

Enter the string PCCOE

EOCCP

Do u want to continue?(1/0)

1

Enter any option

1 length of the string

2 Concatenate of the two string

3 Reverse of the string

4 Copy of the string

5 Compare of the string

6 blank spaces of the string

7 alphanumeric count of the string

Enter the choice

4

String coping

Enter 1st string :Manasi

Enter 2nd string :Bansode

Copied string 2 to 1= Bansode

Do u want to continue?(1/0)

1

Enter any option

1 length of the string

2 Concatenate of the two string

3 Reverse of the string

4 Copy of the string

5 Compare of the string

6 blank spaces of the string

7 alphanumeric count of the string

Enter the choice

5

String compare

Enter 1st string :PCCOE

Enter 2st string :pccoe

s2 is bigger

Do u want to continue?(1/0)

1

Enter any option

1 length of the string

2 Concatenate of the two string

3 Reverse of the string

4 Copy of the string

5 Compare of the string

6 blank spaces of the string

7 alphanumeric count of the string

Enter the choice

6

Total blank spaces in s4 string are: 2

Do u want to continue?(1/0)

1

Enter any option

1 length of the string

2 Concatenate of the two string

3 Reverse of the string

4 Copy of the string

5 Compare of the string

6 blank spaces of the string

7 alphanumeric count of the string

Enter the choice

7

alphanumeric count of the string s5:

 No of alphabets 6

No of numerical values 3

Special characters 1