Strings

**Coding Challenge Day – I**

Write a C program to count the number of alphabet present in a given String .

Input as : Apple

Output as : The count of alphabet is : 5

#include<stdio.h>

int main() {

char s[50]; int i,c;

printf("enter an alphabet :");

scanf("%s",s);

printf("Input as : %s\n",s);

for(c=i=0;i<100;i++)

{

if(s[i]!='\0')c++;

else break;

}

printf("The count of alphabet is :%d",c);

return 0;

}

Write a C program to print the reverse of a given String

Input as :

Enter a String : NareshIT

Output as :

The reverse of the String is : TIhseraN

#include<stdio.h>

int main() {

char s[50]; int i;

printf("Enter a String :");

scanf("%s",s);

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

printf("The reverse of the String is :");

while(i)printf("%c",s[--i]);

return 0;

}

Write a C program to count the Count the vowel, Consonant, Digit and Special Character in a given String .

Input as :

Enter a String : Nareshit @123

Output as :

Vowel count is : 3

Consonant count is : 5

Digit count is : 3

Special Character count is : 1

#include<stdio.h>

int main() {

char a[50];

int v,c,d,sp,i;

printf("Enter a String : ");

scanf("%s",a);

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

if(a[i]>='A'&&a[i]<='Z')a[i]+=32;

for(v=c=d=sp=i=0;a[i]!='\0';i++)

{

if(a[i]>='a'&&a[i]<='z')

{

if(a[i]=='a'||a[i]=='e'||a[i]=='i'||a[i]=='o'||a[i]=='u')

v++;

else c++;

}

else if(a[i]>='0'&&'9'>=a[i])d++;

else sp++;

}

printf("Vowel count is : %d\nConsonant count is : %d\nDigit count is : %d\nSpecial Character count is : %d",v,c,d,sp);

return 0;

}

Write a C program to check is the String contains any vowel or not.

Input as :

Enter a String : Apple

Output as :

This String contains vowel.

Input as :

Enter a String : Rhythm

Output as :

There is no vowel present in this String.

#include<stdio.h>

int main() {

char s[50];

int i,v;

printf("Enter a String :");

scanf("%s",s);

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

if(s[i]>='A'&&s[i]<='Z')s[i]+=32;

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

{

if(s[i]=='a'||s[i]=='e'||s[i]=='i'||s[i]=='o'||s[i]=='u')v++;

}

if(v==0)printf("There is no vowel present in this String.");

else printf("This String contains vowel.");

return 0;

}

Write a C program to sort the string data and print it.

Input as :

Enter a String : apple

Output as :

After Sorting the String is : aelpp

#include<stdio.h>

int main() {

char s[50],t;

int i,j,n;

printf("Enter a String :");

scanf("%s",s);

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

if(s[i]>='A'&&s[i]<='Z')s[i]+=32;

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

n=i;

for(i=0;i<n-1;i++)

{

for(j=i+1;j<n;j++)

{

if(s[i]>s[j])

{

t=s[i];

s[i]=s[j];

s[j]=t;

}

}

}

printf("After Sorting the String is : %s",s);

return 0;

}

**Coding Challenge Day ll**

Write a c program to check the String is Palindrome or Not

#include<stdio.h>

int main() {

char s[50]; int l,i,j;

printf("Enter a String :");

scanf("%s",s);

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

if(s[i]>='A'&&s[i]<='Z')s[i]+=32;

for(l=0;s[l]!='\0';l++);

for(i=0;i<l/2;i++)

{

for(j=l-1;j>l/2;j--)

{

if(s[i]==s[j])

{

i++;

}

else {

printf("%s is not a palindrome",s);

return 0;

}

}

break;

}

printf("%s is a palindrome",s);

return 0;

}

Write a c Program to check whether two given strings are anagram of each other or not.

input 1:- listen

input 2:- silent

this are anagram String

\_\_\_\_\_\_\_

input 1:- Jack

input 2:- Jake

this is not are anagram String

#include<stdio.h>

int main()

{

//Write Code Here

char s1[50],s2[50];

int i,j,l1,l2,f;

printf("input string 1:-");

scanf("%s",s1);

printf("input string 2:-");

scanf("%s",s2);

for(l1=0;s1[l1]!='\0';l1++);

for(l2=0;s2[l2]!='\0';l2++);

if(l1==l2){

for(i=0;i<l1;i++)

{

for(f=j=0;j<l1;j++)

{

if(s1[i]==s2[j])f++;

}

if(f==0){puts("this is not are anagram String"); return 0;}

}

printf("this are anagram String");

}

else puts("this is not are anagram String");

return 0;

}

*Write a c program to print all the frequency of character present*

*For Example:-*

*String s=" Hello Everyone"*

*Output as :-*

*The frequency of H is 1*

*The frequency of e is 3*

*The frequency of l is 2*

*The frequency of o is 2*

*The frequency of   is 1 --------THIS IS FOP CHECKING THE SPACE COUNT*

*The frequency of E is 1*

*The frequency of v is 1*

*The frequency of r is 1*

*The frequency of y is 1*

*The frequency of n is 1*

#include<stdio.h>

int main()

{

//Write Code Here

char s[50];int l,i,j,f;

printf("enter a string:");

gets(s);

for(l=0;s[l]!='\0';l++);

for(i=0;i<l-1;i++)

{

if(s[i]==-1)continue;

for(f=1,j=i+1;j<l;j++)

{

if(s[i]==s[j]){f++;s[j]=-1;}

}

printf("The frequency of %c is %d\n",s[i],f);

}

return 0;

}

Write a c program to sort the String in ascending order ,after sorting print the result in string

format?

Input as :- *"CoreJava"*

output as:-

Before sorting the array

*CoreJava*

After sorting the array

*CJaaeorv*

#include<stdio.h>

int main()

{

//Write Code Here

char s[50],t; int l,i,j;

printf("enter a string:");

scanf("%s",s);

printf("Before sorting the array\n%s\n",s);

for(l=0;s[l]!='\0';l++);

for(i=0;i<l-1;i++)

{

for(j=i+1;j<l;j++)

{

if(s[i]>s[j])

{

t=s[i];

s[i]=s[j];

s[j]=t;

}

}

}

printf("After sorting the array\n%s",s);

return 0;

}

Write a c program to sort the String in Descending Order ,after sorting print the result in string

format?

Input as :- *"CoreJava"*

Before sorting the array

*CoreJava*

After sorting the array

*vroeaaJC*

#include<stdio.h>

int main()

{

//Write Code Here

char s[50],t; int l,i,j;

printf("enter a string:");

scanf("%s",s);

printf("Before sorting the array\n%s\n",s);

for(l=0;s[l]!='\0';l++);

for(i=0;i<l-1;i++)

{

for(j=i+1;j<l;j++)

{

if(s[i]<s[j])

{

t=s[i];

s[i]=s[j];

s[j]=t;

}

}

}

printf("After sorting the array\n%s",s);

return 0;

}

**Coding Day - III**

Write a C program to combine two string in a single String.

Input as :

Enter first String : Naresh

Enter Second String : it

Expected output :

Resulting String is : Nareshit

#include<stdio.h>

int main() {

char s1[50],s2[50];

int l1,l2,i,j;

printf("Enter first String : ");

scanf("%s",s1);

printf("Enter Second String : ");

scanf("%s",s2);

for(l1=0;s1[l1]!='\0';l1++);

for(l2=0;s2[l2]!='\0';l2++){}

i=l1;

for(j=0;j<l2;j++)

{

s1[i]=s2[j];

i++;

}

printf("Resulting String is :%s",s1);

return 0;

}

Write a C program to remove given character from a String.

Input as :

Enter a String : Bookstore

Enter the character you want to remove : o

Expected Output :

Resulting String is : Bkstre

#include<stdio.h>

int main() {

char s[50],d;

int i,j,k,l;

printf("Enter a String :");

scanf("%s",s);

printf("Enter the character you want to remove :");

scanf(" %c",&d);

for(l=0;s[l]!='\0';l++);

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

{

if(s[i]==d)

{

k=i;

for(j=i+1;j<l;j++)

{

s[k]=s[j];

k++;

}

i--;

l--;

// Null-terminate the string after removal

s[l]='\0';

}

}

printf("Resulting String is :%s",s);

return 0;

}

Write a C program to remove all the Spaces from a given String.

Input as :

Enter a String : Black cat on a mat

Expected output : Blackcatonamat

#include<stdio.h>

int main() {

char s[50],d=' ';

int i,j,k,l;

printf("Enter a String :");

gets(s);

for(l=0;s[l]!='\0';l++);

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

{

if(s[i]==d)

{

k=i;

for(j=i+1;j<l;j++)

{

s[k]=s[j];

k++;

}

i--;

l--;

// Null-terminate the string after removal

s[l]='\0';

}

}

printf("Resulting String is :%s",s);

return 0;

}

Write a C program to convert all the character to upper case

from a given index to end index. If the given index is not available then print

Index is not available.

Input as :

Enter a String : I am a student

Enter the starting index number : 4

Enter the ending index number : 13

Expected output :

Resulting String is : I am A STUDENT

#include<stdio.h>

int main() {

char s[50];

int f,e,l,i,c;

printf("Enter a String : ");

gets(s);

printf("Enter the starting index number :");

scanf("%d",&f);

printf("Enter the ending index number : ");

scanf("%d",&e);

for(l=0;s[l]!=0;l++);

for(c=i=0;1;i++)

{

if(s[i]!=' ')c++;

if(c==f)break;

}

for(;i<=e+1;i++)

{

if(s[i]>='a'&&s[i]<='z')s[i]-=32;

if(s[i]=='\0')break;

}

printf("Resulting String is : %s",s);

return 0;

}

Write a C program to check the given string contains a capital

alphabet, small alphabet, special character and digit.

Input as :

Enter a String : Nareshit@123

Expected output :

The given String is matching to our cases.

Input as :

Enter a String : nareshit

Expected output :

The given String is not matching to our cases.

#include<stdio.h>

int main(){

char s[50];

int l,i,c,sm,a,d;

printf("Enter a String :");

gets(s);

for(l=0;s[l]!='\0';l++);

for(d=a=sm=c=i=0;i<l;i++)

{

if(s[i]>='A'&&s[i]<='Z')c++;

else if(s[i]>='a'&&s[i]<='z')sm++;

else if(s[i]>='0'&&s[i]<='9')d++;

else a++;

}

if(d>0&&a>0&&sm>0&&c>0)printf("The given String is matching to our cases.");

else printf("The given String is not matching to our cases.");

return 0;

}

**Coding Challenge Day – V**

C Program to Display All Characters Present in the Prime Position of a String.

Test Data :

Input a string : today is wednesday

Output as : da sdey

#include<stdio.h>

int main() {

char s[50];

int l,i,j,c;

printf("Input a string : ");

gets(s);

for(l=0;s[l]!='\0';l++);

printf("Output as :");

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

{

for(c=j=0;j<=l;j++)

{

if((i%(j+1))==0)c++; //\*\*

}

if(c==2)printf("%c",s[i]);

}

return 0;

}

Write a C program to reverse all the vowels present in a given string. Return the newly created string

or modified string .

Test Data :

Input a string: Aeroplane

Output as : earoplenA

#include<stdio.h>

int main(){

char s[50],t;

int l,i,j;

printf("Input a string:");

scanf("%s",s);

for(l=0;s[l]!='\0';l++);

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

{

if (s[i] == 'a' || s[i] == 'e' || s[i] == 'i' || s[i] == 'o' || s[i] == 'u' ||

s[i] == 'A' || s[i] == 'E' || s[i] == 'I' || s[i] == 'O' || s[i] == 'U') //

{

for(j=l-1;j>i;j--)

{

if (s[j] == 'a' || s[j] == 'e' || s[j] == 'i' || s[j] == 'o' || s[j] == 'u' ||

s[j] == 'A' || s[j] == 'E' || s[j] == 'I' || s[j] == 'O' || s[j] == 'U')

{

t=s[i];

s[i]=s[j];

s[j]=t;

l=j-1; //

break;

}

}

}

}

printf("%s",s);

return 0;

}

Write a C program to reverse Words of the Given String?

Ex: Today is Monday

Output: yadoT si yadnoM

#include<stdio.h>

int main() {

char s[50],t;

int i,j,k,l,m;

printf("enetera a string:");

gets(s);

for(l=0;s[l]!='\0';l++);

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

{

if(s[i]!=' ')

{

for(j=i+1;j<=l;j++)

{

if(s[j]==' '||j==l)

{

k=i;

for(m=j-1;m>k;m--)

{

t=s[k];

s[k]=s[m];

s[m]=t;

k++;

}

break;

}

}

i=j;

}

}

puts(s);

return 0;

}

C Program to Remove Characters in Second String which are present in First String.

Test Data :

Input 1st string: apple

Input 2nd string: aeroplane

Output as : ron

#include<stdio.h>

int main() {

char s1[50],s2[50];

int i,j,k,l1,l2;

printf("Input 1st string: ");

scanf("%s",s1);

printf("Input 2nd string: ");

scanf("%s",s2);

for(l1=0;s1[l1]!=0;l1++);

for(l2=0;s2[l2]!=0;l2++){}

for(i=0;i<l1;i++)

{

for(j=0;j<l2;j++)

{

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

{

for(k=j;k<l2;k++)

{

s2[k]=s2[k+1];

}

s2[k]='\0';

}

}

}

puts(s2);

return 0;

}