**Date:05:05:2021**

**Pointers**

**1)reverse the string and remove the vowels**

**(i/p:summer o/p1:remmus o/p2:rmms**

#include <stdio.h>

int main() {

char a[50],b[50],c[50];

printf("Enter the string : ");

scanf("%s",&a);

for(int i = 0;i<strlen(a);i++){

b[i]=a[strlen(a)-i-1];

}

printf("\nThe reversed string is :%s",b);

int x=0;

for(int i=0;i<strlen(a);i++){

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

continue;

}

else{

c[x] = a[i];

x++;

}

}

printf("\nThe string without vowels is : %s",c);

return 0;

}

**2)find the character which occurs maximum no of times in a string(i/p:summer o/p:m)**

#include <stdio.h>

#include<string.h>

int main() {

char a[100],b[50],m[50];

int c[50];

int n=0;

printf("Enter the string : ");

scanf("%s",a);

for(int i=0;i<strlen(a);i++){

int x=0;

for(int j=0;j<strlen(b);j++){

if(b[j] == a[i]){

x++;

}

}

if(x==0)

{

b[n]=a[i];

n++;

}

}

int max=0,mc=0;

char ma;

for(int i=0;i<strlen(b);i++){

int count=0;

for(int j=0;j<strlen(a);j++){

if(b[i]==a[j]){

count++;

}

}

if(max<count){

max=count;

ma=b[i];

}

if(count == 1){

m[mc]=b[i];

mc++;

}

}

printf("\n%c occurs maximun of %d times",ma,max);

return 0;

}

**3)given an array each number represents jump if you are able to reach the last return true else return false**

**[2,1,2,1,5]-return true**

**[1,2,1,3,1]=return false**

#include <stdio.h>

int main() {

int a[10];

int n=0,x=0;

printf("Enter the number of elements in the array : ");

scanf("%d",&n);

for(int i=0;i<n;i++){

printf("\nEnter the %d element : ",i+1);

scanf("%d",&a[i]);

}

while (x<n-1){

x = x+a[x];

}

if(x==n-1){

printf("\nTRUE");

}

else{

printf("\nFALSE");

}

return 0;

}

**4)find how many characters and numbers are there in alphanumeric string**

**i/p)ab2c4de o/p) alphabets=5 numbers=2**

#include <stdio.h>

int main() {

char a[100];

int al=0,n=0;

printf("Enter the string : ");

scanf("%s",&a);

for(int i=0;i<strlen(a);i++){

if(a[i]>=97 && a[i]<=122){

al++;

}

else{

n++;

}

}

printf("alphabets : %d\nnumerics : %d",al,n);

return 0;

}

**5)check whether a number is power of 2 without built in function**

**i/p:10 o/p:NO**

**i/p:16 o/p:Yes**

#include <stdio.h>

int main() {

int a=0,x=2;

printf("Enter the numbmer : ");

scanf("%d",&a);

while(a>=x){

if(x==a){

printf("\nYES");

break;

}

else{

x=x\*2;

}

}

if(x>a){

printf("\nNO");

}

return 0;

}

**Date:06:05:2021**

**1.Write a c program to find no of vowels and consonants in string**

**Input:india**

**Output:vowels:3**

**consonants:2**

#include <stdio.h>

#include<string.h>

int main() {

char a[50];

int vow=0,con=0;

printf("Enter the string : ");

gets(a);

for(int i=0;i<strlen(a);i++){

if(a[i]>=97 && a[i]<=122){

if(a[i]==97 || a[i]==101 || a[i]== 105 || a[i]==111 || a[i]==117){

vow++;

}

else{

con++;

}

}

}

printf("\nvowels : %d\nconsonants : %d",vow,con);

return 0;

}

**2.Find the equivalent numerical representation of string**

**Input:abzc**

**Output:12263**

#include <stdio.h>

#include<string.h>

int main() {

char a[50];

printf("Enter the string : ");

gets(a);

for(int i=0;i<strlen(a);i++){

printf("%d ",a[i]-96);

}

return 0;

}

**3.Find the no of occurences of each character in string**

**Input:abcba**

**Output:a=2**

**b=2**

**a=1**

#include <stdio.h>

#include<string.h>

int main() {

char a[100],b[50];

int c[50];

int n=0;

printf("Enter the string : ");

scanf("%s",a);

for(int i=0;i<strlen(a);i++){

int x=0;

for(int j=0;j<strlen(b);j++){

if(b[j] == a[i]){

x++;

}

}

if(x==0)

{

b[n]=a[i];

n++;

}

}

for(int i=0;i<strlen(b);i++){

int count=0;

for(int j=0;j<strlen(a);j++){

if(b[i]==a[j]){

count++;

}

}

printf("\n%c occurs %d time",b[i],count);

}

return 0;

}

**4.Eliminate all duplicate elements in a string**

**Input:abackc**

**Output:abck**

#include <stdio.h>

#include<string.h>

int main() {

char a[50],b[50];

int n=0;

printf("Enter the string : ");

scanf("%s",a);

for(int i=0;i<strlen(a);i++){

int x=0;

for(int j=0;j<strlen(b);j++){

if(b[j] == a[i]){

x++;

}

}

if(x==0)

{

b[n]=a[i];

n++;

}

}

printf("%s",b);

return 0;

}

**5.Find the character which occurs max and min in string**

**Input:abbcbce**

**Output:max=b**

**min=a,e**

#include <stdio.h>

#include<string.h>

int main() {

char a[100],b[50],m[50];

int c[50];

int n=0;

printf("Enter the string : ");

scanf("%s",a);

for(int i=0;i<strlen(a);i++){

int x=0;

for(int j=0;j<strlen(b);j++){

if(b[j] == a[i]){

x++;

}

}

if(x==0)

{

b[n]=a[i];

n++;

}

}

int max=0,mc=0;

char ma;

for(int i=0;i<strlen(b);i++){

int count=0;

for(int j=0;j<strlen(a);j++){

if(b[i]==a[j]){

count++;

}

}

if(max<count){

max=count;

ma=b[i];

}

if(count == 1){

m[mc]=b[i];

mc++;

}

}

printf("\n%c occurs maximun of %d times",ma,max);

printf("\n");

for(int i=0;i<strlen(m);i++){

printf("%c,",m[i]);

}

printf("occurs minimun of 1 time");

return 0;

}