**Assignment-17**

1. Write a program to calculate the length of the string. (without using built-in method)

Ans-#include<stdio.h>

int main()

{

char s[20];

int i;

printf("enter a string");

fgets(s,20,stdin);

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

printf("%s length is %d",s,i-1);

return 0;

}

1. Write a program to count the occurrence of a given character in a given string.

Ans-#include<stdio.h>

int main()

{

char s[20],a;

int i,count=0;

printf("enter a string: ");

fgets(s,20,stdin);

printf("enter a character: ");

a=getchar();

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

{

if(s[i]==a)

count++;

}

if(count>0)

printf("%c occurre in %d times",a,count);

else

printf("%c doesn't present in that string %s",a,s);

return 0;

}

1. Write a program to count vowels in a given string

Ans-#include<stdio.h>

int main()

{

char s[20];

int i,count=0;

printf("enter a string: ");

fgets(s,20,stdin);

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

{

if(s[i]=='a'||s[i]=='A'||s[i]=='e'||s[i]=='E'||s[i]=='i'||s[i]=='I'||s[i]=='o'||s[i]=='O'||s[i]=='u'||s[i]=='U')

count++;

}

if(count>0)

printf("%d number of vowels is occure",count);

else

printf("no vowel present in that string %s",s);

return 0;

}

1. Write a program to convert a given string into uppercase

Ans-#include<stdio.h>

int main()

{

char s[20];

int i,count=0;

printf("enter a string: ");

fgets(s,20,stdin);

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

{

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

s[i]=s[i]-32;

}

printf("%s",s);

return 0;

}

1. Write a program to convert a given string into lowercase

Ans-#include<stdio.h>

int main()

{

char s[20];

int i,count=0;

printf("enter a string: ");

fgets(s,20,stdin);

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

{

if(s[i]>=65&&s[i]<=90)

s[i]=s[i]+32;

}

printf("%s",s);

return 0;

}

1. Write a program to reverse a string.

Ans-#include<stdio.h>

int main()

{

char s[20],temp;

int i,count=0,l,j;

printf("enter a string: ");

gets(s);

l=strlen(s);

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

{

temp=s[i];

s[i]=s[j];

s[j]=temp;

}

printf("\n%s",s);

return 0;

}

7. Write a program in C to count the total number of alphabets, digits and special

characters in a string.

Ans-#include<stdio.h>

int main()

{

char s[20];

int i,alphabet,digit,special;

printf("enter a string: ");

fgets(s,20,stdin);

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

{

if((s[i]>=65&&s[i]<=90)||(s[i]>=97&&s[i]<=122))

alphabet++;

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

digit++;

else

special++;

}

printf("\n%d alphabet, %d digit, %d special character present in that string %s", alphabet,digit,special,s);

return 0;

}

1. Write a program in C to copy one string to another string.

Ans-#include<stdio.h>

int main()

{

char s[20],p[30];

int i;

printf("enter a string: ");

fgets(s,20,stdin);

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

{

p[i]=s[i];

}

printf("\nCopied string is %s",p);

return 0;

}

1. Write a C program to sort a string array in ascending order.
2. Write a program in C to Find the Frequency of Characters.

Ans-#include<stdio.h>

int main()

{

char s[20],p[30];

int i,count,f,j;

printf("enter a string: ");

fgets(s,20,stdin);

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

{

count=0;

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

{

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

break;

}

if(f==i)

{

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

{

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

count++;

}

printf("\n%c is present %d times",s[i],count);

}

}

return 0;

}