1)

#include<stdio.h>

#include<stdlib.h>

int main()

{

int i,n;

printf("enter the length of char array\n");

scanf("%d",&n);

char str[n];

printf("enter the string \n");

fflush(stdin);//we have to flush the input buffer so that inline character is flushed

fgets(str,n,stdin);

for(i=0;str[i];i++);

printf("the length of the string is %d",i);

return 0;

}

2)

#include<stdio.h>

int main()

{

int i,c=0;

char str[20],n;

printf("enter a string \n");

fgets(str,20,stdin);

printf("enter a character for count\n");

scanf("%c",&n);

for(i=0;str[i];i++)

{

if(str[i]==n)

{

c++;

}

}

printf("the count of given character is %d",c);

return 0;

}

3)

#include<stdio.h>

int main()

{

int c=0,i;

char str[20];

printf("enter any string\n");

fgets(str,20,stdin);

for(i=0;str[i];i++)

{

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

{

c++;

}

}

printf("the number of vowels in the given strings is %d ",c);

return 0;

}

4)

#include<stdio.h>

int main()

{

int i;

char a[20];

printf("enter any string \n");

fgets(a,20,stdin);

for(i=0;a[i];i++)

{

if(a[i]>90)

{

a[i]=a[i]-32;

}

}

printf("the required string is %s",a);

return 0;

}

5)

#include<stdio.h>

int main()

{

int i;

char a[20];

printf("enter any string \n");

fgets(a,20,stdin);

for(i=0;a[i];i++)

{

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

{

a[i]=a[i]+32;

}

}

printf("the required string is %s",a);

return 0;

}

6)

#include<stdio.h>

int main()

{

char a[20],temp;

int i=0,j,l;

printf("enter a string \n");

fgets(a,20,stdin);

for(l=0;a[l];l++);

j=l-2;

while(i!=j&&i<j)

{

temp=a[j];

a[j]=a[i];

a[i]=temp;

i++;

j--;

}

printf("the required string is %s",a);

return 0;

}

7)

#include<stdio.h>

int main()

{

int a=0,d=0,sc=0,i;

char str[20];

printf("enter any string\n");

fgets(str,20,stdin);

for(i=0;str[i];i++)

{

if(str[i]>='a'&&str[i]<='z'||str[i]>='A'&&str<='Z')

{

a++;

}

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

{

d++;

}

else

{

sc++;

}

}

printf("the no. of alphabet in the string is %d \n the no. of digits in the string is %d\n the no. of special characters in the string is %d ",a,d,sc-1);

return 0;

}

8)

#include<stdio.h>

int main()

{

char a[20],b[20];

int i;

printf("enter any string\n");

fgets(a,20,stdin);

for(i=0;a[i];i++)

{

b[i]=a[i];

}

printf("string is copied and required string is %s",b);

return 0;

}

9)

#include<stdio.h>

int main()

{

int i,j,l;

char a[20],temp;

printf("enter any string \n");

fgets(a,20,stdin);

for(l=0;a[l];l++);

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

{

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

{

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

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

}

}

printf("the sorted string is %s",a);

return 0;

}

10)

#include<stdio.h>

int main()

{

char a[20];

int i,f[150]={0};

printf("enter any string\n");

fgets(a,20,stdin);

for(i=0;a[i];i++)

{

f[a[i]]++;

}

for(i=0;i<=150;i++)

{

if(f[i]!=0&&f[i]!='\n'&&f[i]!=' ')

{

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

}

}

return 0;

}