```c
#include<stdio.h>

#include<string.h>

#include<ctype.h>


void main()

{

        char str[20];

        printf("enter the string=");

        scanf("%s",str);


        //1.strlen

        printf("1)%d\n",strlen(str));


        //2.strcpy

        char str1[20];

        printf("2)%s\n",strcpy(str1,str));


        //3.strncpy

        char str5[5];

        printf("3)%s\n",strncpy(str5,str1,3));


        //4.strcat

        printf("4)%s\n",strcat(str1,str));


        //5.strupr

        printf("5)%s\n",strupr(str));


        //6.strlwr

        printf("6)%s\n",strlwr(str1));


        //7.strcmp
```

```c
        char str2[20];

        printf("enter second string=");

        scanf("%s",str2);

        int cmp1=strcmp(str1,str2);

if(cmp1==1)

printf("7)str2 is bigger\n");

else if(cmp1==-1)

printf("7)str1 is bigger\n");

else

printf("7)same strings\n");


        //8.strncmp

        int cmp=strncmp(str1,str2,5);

if(cmp==1)

printf("8)str2 is bigger\n");

else if(cmp==-1)

printf("8)str1 is bigger\n");

else

printf("8)same strings\n");


        //9.strchr

        char c='r';

        char *chr=strchr(str1,c);

        if(chr!=NULL)

        printf("9)character found at %s\n",chr);

        else

        printf("9)Substring not Found\n");


        //10.strrchr

        char *chr2=strchr(str1,c);

        if(chr!=NULL)
```

```c
printf("10)character found at %s\n",chr2);
else
printf("10)Substring not Found\n");




//11.strstr
char needle[]="gau";
char *ptr=strstr(str1,needle);
if(ptr!=NULL)
printf("11)Substring Found at %s\n",ptr);
else
printf("11)Substring not Found\n");


//12.strspn
char str3[]="gau";
int t=strspn(str1,str3);
printf("12)Length of initial segment=%zu\n",t);


//13.strcspn
char str4[]="sptri";
int ct=strcspn(str1,str4);
printf("13)Length of initial segment of str1 that not contain str4=%zu",ct);


//14.isalph
char ch=getchar();
int i=isalpha(ch);
if(i)
printf("14)Aplhabetic\n");
else
printf("14)not alphabetic\n");
```

```c
//15.isdigit
fflush(stdin);
char dig=getchar();
if(isdigit(dig))
printf("15)digit\n");
else
printf("15)not digit");

//16.isspace()
fflush(stdin);
char spc=getchar();
if(isspace(spc))
printf("is space\n");
else
printf("is not space\n");
}
```