Assignment 10

//mystrcmp

#include<stdio.h>

#include<string.h>

int mystrcmp(char\*,char\*);

void main(){

char str1[]="abcd";

char str2[]="abCd";

int res=mystrcmp(str1,str2);

if(res==0){

printf("same string :0");

}

else{

if(res==-1)

{

printf("not same:1");

}

else

printf("not same:-1");

}

}

int mystrcmp(char\* str1, char\* str2){

if(strlen(str1)==strlen(str2)){

for(int i=0;i<strlen(str1);i++){

if(str1[i]!=str2[i]){

//check asscii value

if(str1[i]>str2[i])

return 1;

else

return -1;

}

}

return 0;//for loop exits by its end value (all iterations)

}

else{

return NULL;

}

}

//mystrstr

#include<string.h>

#include<stdio.h>

char\* mystrstr(char\*,char\*);

void main() {

/\*

char str[]="abdabeabxyz";

char sub[]="axy";\*/

char str[]="prachiti";

char sub[]="chiti";

char\* sub\_str=mystrstr(str,sub);

printf("%s",sub\_str);

}

char\* mystrstr(char\* str,char\* sub) {

//check the length first

if(strlen(str)>=strlen(sub)) {

int p,len;

//compare sub string with sub

for(int i=0; sub[i]!='\0'; i++) {

//i is for sub string

//check each sub element with entire string

for(int j=0; str[j]!='\0'; j++) {

//j for string

//compare

if(sub[i]==str[j]) {

//here we get 1st match char .. now from j+1 check for another element in sub

int x=i+1;

len=1;//starting from 1 bcz we got 1st elemrnt already

for(int k=j+1; k<strlen(str); k++) { //k is on str so its end on length

if(sub[x]==str[k]) {

//get next match element so incremwnt sub

x++;

len++;//to check how much times condition satisfied

} else {

break;

}

}//end of k for loop

if(strlen(sub)==len) {

return &str[j];

}

}//end of j for loop

}//end of i for loop

}

return NULL;

} else {

return NULL;

}

}

//mystrrev

#include<stdio.h>

#include<string.h>

char\* mystrrev(char\*);

void main(){

char str[5]="abcde";

char\* rev=mystrrev(str);

printf("mystrrev :%s",rev);

}

char\* mystrrev(char\* str){

int temp;

int j=strlen(str)-1;

for(int i=0;i<(strlen(str)/2);i++){

temp=str[i];

str[i]=str[j];

str[j]=temp;

j--;

}

return str;

}

//strrchr (last occurance)

#include<stdio.h>

#include<string.h>

char\* mystrrchar(char\*,char);

void main(){

char str[]="ababncdn";

char ch;

printf("enter the char to(last occ) search:");

scanf("%c",&ch);//b

char\* last\_occ= mystrrchar(str,ch);

printf("\nmystrrchr:%s",last\_occ);

}

char\* mystrrchar(char\*str, char ch){

//count

int count=0;

for(int i=0;str[i]!='\0';i++){

if(str[i]==ch)

count++;

}

int num=count;

int k;

for(k=0;num!=0;k++){

if(str[k]==ch){

num--;

//printf("ch :%c\n",ch);

//printf("num:%d\n",num);

printf("K:%d\n",k);

}

}

// k++ (last ieteartion ) k=8 then check num!='\0'

printf("K:%d\n",k-1);

//printf("str[k]:%c",str[k-1]);

return &str[k-1];

}

//mystrncmp

#include<stdio.h>

#include<string.h>

int mystrncmp(char\*,char\*,int);

void main(){

char str1[5]="abcde";

char str2[5]="absdc";

int n ;

printf("Enter the number of character wants to compare:");

scanf("%d",&n);

int res=mystrncmp(str1,str2,n);

if(res==0)

printf("same");

else

printf("not same");

}

int mystrncmp(char\* str1,char\* str2,int n){

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

if(str1[i]!=str2[i])

{

return 1;

}

}

return 0;

}

//mystrncat

#include<stdio.h>

#include<stdlib.h>

#include<string.h>

char \* mystrncat(char\*,char\*,int);

void main(){

char str1[20]="prachiti";

char str2[]="thakurFbs";

int n ;

printf("Enter the number of character wants to concat:");

scanf("%d",&n);

char\* n\_cat=mystrncat(str1,str2,n);

printf("mystrcat:%s",n\_cat);

}

char \* mystrncat(char\* str1,char\*str2,int n){

if(strlen(str2)>=n){

int len=strlen(str1);

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

str1[len]=str2[i];

len++;

}

return str1;

}else{

return NULL;

}

}

//mystrncasecmp

#include<stdio.h>

#include<string.h>

int mystrncasecamp(char\*,char\*,int);

void main(){

char str1[5]="abcde";

char str2[5]="ABCfE";

int n ;

printf("Enter the number of character wants to compare:");

scanf("%d",&n);

int res=mystrncasecamp(str1,str2,n);

if(res==0){

printf("same");

}

else{

printf("not same");

}

}

int mystrncasecamp(char\* str1,char\*str2,int n){

int count=0;

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

if(str1[i]==str2[i]){

count++;

}else{

if((str1[i]==str2[i]-32)||str1[i]==str2[i]+32){

count++;

}

else{

return 1;

}

}

}

if(count==n){

return 0;

}

}

//strlwr

#include<stdio.h>

char\* mystrlwr(char\*);

void main(){

char str[]="PRACHITI";

char\* lower=mystrlwr(str);

printf("mystrlwr:%s",lower);

}

char\* mystrlwr(char\* s){

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

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

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

}

return s;

}

//mystrrchr

#include<stdio.h>

#include<string.h>

char\* mystrrchar(char\*,char);

void main(){

char str[]="ababncdn";

char ch;

printf("enter the char to(last occ) search:");

scanf("%c",&ch);//b

char\* last\_occ= mystrrchar(str,ch);

printf("\nmystrrchr:%s",last\_occ);

}

char\* mystrrchar(char\* str,char ch){

for(int i=(strlen(str)-1);i>=0;i--){

if(str[i]==ch)

return &str[i];

}

return NULL;

}

//strcpy

#include<stdio.h>

#include<string.h>

char\* mystrcpy(char\*,char\*);

void main(){

char str1[10]="prachiti";

char str2[15];

char\* cpy=mystrcpy(str2,str1);

printf("strcpy:%s",cpy);

}

char\* mystrcpy(char\* str2,char\*str1){

for(int i=0;str1[i]!='\0';i++){

str2[i]=str1[i];

}

str2[i]='\0';

return str2;

}

//strchr

#include<stdio.h>

#include<string.h>

char\* mystrchr(char\*,char);

void main(){

//char arry

char str[10]="abdec";

printf(" string :%s\n",str);

char ch;

printf("enter the char to search:");

scanf("%c",&ch);

char\* chr=mystrchr(str,ch);

printf("strchr:%s",chr);

}

//function defination

char\* mystrchr(char\* str,char ch){

for(int i=0;str[i]!='\0';i++){

if(str[i]==ch)

return &str[i];

}

}

//mystrcasecmp

#include<stdio.h>

#include<string.h>

int mystrcasecmp(char\*,char\*);

void main(){

char str1[]="abcd";

char str2[]="ABCe";

int res=mystrcasecmp(str1,str2);

if(res==0)

printf("same");

else

printf("not same");

}

int mystrcasecmp(char\* str1,char\* str2){

if(strlen(str1)==strlen(str2)){

int count=0;

for(int i=0;i<strlen(str1);i++){

if(str1[i]==str2[i]){

count++;

}else{

if(str1[i]==str2[i]-32){

count++;

}else{

if(str1[i]==str2[i]+32){

count++;

}

else{

return 1;//not match that chac

}

}

}

}

//after comparing whole string

if(count==strlen(str1)){

return 0;

}

}

else{

return NULL;

}

}

//mystrupr

#include<stdio.h>

char\* mystrupr(char\*);

void main(){

char str[]="prachiti";

char\* s=mystrupr(str);

printf("mystrupr: %s",s);

}

char\* mystrupr(char\* str){

for(int i=0;str[i]!='\0';i++){

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

str[i]=str[i]-32;

}

return str;

}

//mystrncpy

#include<stdio.h>

#include<string.h>

char\* mystrncpy(char\*,char\*,int);

void main(){

char str1[10]="Prachiti";

char str2[10];

int n;

printf("Enter n number:");

scanf("%d",&n);

char\* cpy=mystrncpy(str2,str1,n);

printf("strncpy:%s",cpy);

}

char\* mystrncpy(char\* str2,char\* str1,int n){

//here we cant check the len of str2 bcz str2 size is 10 length ==count of charc but now is nothing in str2

if(strlen(str1)>=n){

int i;

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

str2[i]=str1[i];

//printf("i :%d",i);

}

str2[i]='\0'; //if we cant do this . then str2 will char array without null

//so %s will not get null after end ->in main while printing

return str2;

}

else{

return NULL;

}

}