***Assignment No. 3A***

Implement following operations on string without pointers

I. Length II. Palindrome

III. String Comparison IV. Copy

V. Reverse VI. Substring

Roll No. :66

Batch: - S3

#include<stdio.h>

void length(char s[10]);

void copy(char s[10],char t[10]);

void concate(char s[10],char t[10]);

void reverse(char s[10],char t[10]);

int palindrome(char s[10]);

int compare(char s[10],char t[10]);

void main()

{

int ch,n;

char s[10],t[10];

do

{

printf("\nMenu\n");

printf("\n1) Lenth\n");

printf("\n2) Copy\n");

printf("\n3) Concate\n");

printf("\n4) Reverse\n");

printf("\n5) Palindrome\n");

printf("\n6) Compare\n");

printf("\nEnter your choice\n");

scanf("%d",&ch);

switch(ch)

{

case 1: printf("\nEnter string\n"); scanf("%s",s);

length(s);

break;

case 2: printf("\nEnter string\n"); scanf("%s",s);

copy(s,t);

break;

case 3: printf("\nEnter first string\n"); scanf("%s",s);

printf("\nEnter second string\n"); scanf("%s",t);

concate(s,t);

break;

case 4: printf("\nEnter the string\n"); scanf("%s",s);

printf("\nReverse of string is \n");

reverse(s,t);

break;

case 5: printf("\nEnter the string\n"); scanf("%s",s);

n=palindrome(s);

if(n==0)

{ printf("\nString is palindrome\n"); }

else

{ printf("\nString is not palindrome\n"); }

break;

case 6: printf("\nEnter the first string\n"); scanf("%s",s);

printf("\nEnter the second string\n"); scanf("%s",t);

n=compare(s,t);

if(n==0)

{ printf("\nStrings are equal\n"); }

else if(n==-1)

{ printf("\nSecond string is greater\n"); }

else

{ printf("\nFirst string is greater\n"); }

break;

default: printf("\nINVALID CHOICE. ");

break;

}

}

while(ch<7);

}

void length(char s[10])

{

int i=0;

while(s[i]!='\0')

{ i++; }

printf("\nLength of string is %d\n",i);

}

void copy(char s[10],char t[10])

{

int i;

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

{ t[i]=s[i]; }

t[i]='\0';

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

}

void concate(char s[10],char t[10])

{

int i;

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

{ i++; }

int j;

for(j=0;t[j]!='\0';)

{

s[i]=t[j];

i++;

j++;

}

s[i]='\0';

printf("\nConcated string is %s\n",s);

}

void reverse(char s[10],char t[10])

{

int i=0,j=0;

while(s[i]!='\0')

{ i++; }

i--;

while(i>=0)

{

t[j]=s[i];

i--;

j++;

}

t[j]='\0';

printf("%s",t);

}

int palindrome(char s[10])

{

int i=0,j=0;

while(s[i]!='\0')

{ i++; }

i--;

while(i>j)

{

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

{ i--; j++; }

else

{ return 1; }

}

return 0;

}

int compare(char s[10],char t[10])

{

int i=0,j=0;

while(s[i]!='\0')

{

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

{ i++; j++; }

else if(s[i]<t[j])

{ return -1; }

else

{ return 1; }

}

return 0;

}

-------------OUTPUT-------------

Menu

1) Lenth

2) Copy

3) Concate

4) Reverse

5) Palindrome

6) Compare

Enter your choice

1

Enter string

Abhishek

Length of string is 8

Menu

1) Lenth

2) Copy

3) Concate

4) Reverse

5) Palindrome

6) Compare

Enter your choice

2

Enter string

Ashwin

Copied string is Ashwin

Menu

1) Lenth

2) Copy

3) Concate

4) Reverse

5) Palindrome

6) Compare

Enter your choice

3

Enter first string

Ashwin

Enter second string

Naik

Concated string is AshwinNaik

Menu

1) Lenth

2) Copy

3) Concate

4) Reverse

5) Palindrome

6) Compare

Enter your choice

4

Enter the string

Abhishek

Reverse of string is

kehsihbA

Menu

1) Lenth

2) Copy

3) Concate

4) Reverse

5) Palindrome

6) Compare

Enter your choice

5

Enter the string

Pankaj

String is not palindrome

Menu

1) Lenth

2) Copy

3) Concate

4) Reverse

5) Palindrome

6) Compare

Enter your choice

6

Enter the first string

Abhishek

Enter the second string

Sharma

Second string is greater