**Assignment 3.(String operations).**

#include <iostream>

#include<cstring>

#include<iterator>

using namespace std;

class strings{

char s1[20],s2[20];

public:

void concat(){

cout<<endl<<"Enter string:";

cin>>s1;

cout<<endl<<"Enter second string:";

cin>>s2;

int i,j;

for(i=0;s1[i]!='\0';i++){}

s1[i]=' ';

i++;

for(j=0;s2[j]!='\0';j++){

s1[i]=s2[j];

i++;

}

s1[i]='\0';

cout<<endl<<"Concatenated string:"<<s1;

}

void copying(){

cout<<endl<<"Enter string:";

cin>>s1;

int i;

for(i=0;s1[i]!='\0';i++){

s2[i]=s1[i];

}

s2[i]='\0';

cout<<endl<<"copied string:"<<s2;

}

void compare(){

int flag=0;

cout<<endl<<"Enter string:";

cin>>s1;

cout<<endl<<"Enter second string:";

cin>>s2;

int cnt=0,cnt1=0;

for(int i=0;s1[i]!='\0';i++){

cnt++;

}

for(int i=0;s2[i]!='\0';i++){

cnt1++;

}

if(cnt!=cnt1){

cout<<endl<<"Strings are not equal!!!";

}else{

for(int i=0;s1[i]!='\0';i++){

if(s1[i]!=s2[i]){

flag=1;

break;

}}

if(flag==1){

cout<<endl<<"Strings are not equal!!!";

}else{

cout<<endl<<"Strings are equal!!!";

}

}}

void reversed(){

cout<<endl<<"Enter string:";

cin>>s1;

int i=0,cnt=0;

for(i=0;s1[i]!='\0';i++){

cnt++;}

i=0;

for(int j=cnt-1;j>=0;j--){

s2[i]=s1[j];

i++;

}

s2[i]='\0';

cout<<endl<<s2;

}

void substring(){

cout<<endl<<"Enter string:";

cin>>s1;

cout<<endl<<"Enter substring:";

cin>>s2;

int i=0,j=0,flag=0;

for(i=0,j=0;s1[i]!='\0'||s2[j]!='\0';i++){

if(s2[i]==s1[i]){

j++;

flag=1;

}else{

j=0;

flag=0;

}

}

if(flag==1){

cout<<endl<<s2<<" is the substring of "<<s1;

}else{

cout<<endl<<s2<<" is not the substring of "<<s1;

}

}

void length(){

cout<<endl<<"Enter string:";

cin>>s1;

int i=0,cnt=0;

for(i=0;s1[i]!='\0';i++){

cnt++;}

cout<<endl<<"length:"<<cnt;

}

};

int main()

{

strings s1;

int ch;do{

cout<<endl<<"\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*String operations\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*";

cout<<endl<<"1.copy string...\n2.concatenate string...\n3.Equal string..\n4.Reverse string..\n5.Length of string...\n6.Find substring...";

cout<<endl<<"Enter your choice:";

cin>>ch;

switch(ch){

case 1:

s1.copying();

break;

case 2:

s1.concat();

break;

case 3:

s1.compare();

break;

case 4:

s1.reversed();

break;

case 5:

s1.length();

break;

case 6:

s1.substring();

break;

}

}while(ch!=7);

return 0;

}