#include<iostream>

using namespace std;

int mystrlen(const char\* text) {

int counter = 0;

for (size\_t i = 0; text[i]!='\0'; i++)

{

counter++;

}

return counter;

}

void mystrcpy(char\*& destination, const char\* source) {

int l = strlen(source);

destination = new char[l + 1];

for (size\_t i = 0; i < l; i++)

{

destination[i] = source[i];

}

destination[l] = '\0';

}

void mystrcat(char\*& destination, const char\* source) {

int l1 = strlen(destination);

int l2 = strlen(source);

auto newarray = new char[l1 + l2 + 1]{};

for (size\_t i = 0; i < l1; i++)

{

newarray[i] = destination[i];

}

for (size\_t i = l1,i2=0; i2 < l2; i++,i2++)

{

newarray[i] = source[i2];

}

newarray[l1 + l2] = '\0';

delete[]destination;

destination = newarray;

newarray = nullptr;

}

//C Style String

void main() {

// \0 - null terminator , it means - end of line

//cout << "Hello World" << endl;

//char text[] = { 'C','A','T','\0'};

//char text[] = { "Salam"};

//const char\* text = "salam";

//text[0] = 'A'; //error

//cout << text<<endl;

/\*for (size\_t i = 0; text[i]!='\0'; i++)

{

cout << text[i] << endl;

}\*/

//char text[100]{};

////cin >> text; // it takes only first word (until space)

//cin.getline(text, 100);

//cout << "this is text : " << text << endl;

/\*char\* text = new char[100]{};

cin.getline(text,100);

cout <<"this is a text : "<< text << endl;\*/

/\*char\* text = new char[100]{};

cout << "Enter text : ";

cin.getline(text, 100);

cout << "text is : " << text << endl;\*/

/\*cout << "Count of character : "<<strlen(text) << endl;

cout << "MyStrLen : " << mystrlen(text) << endl;\*/

/\*char\* text2 = new char[1];

mystrcpy(text2, text);

cout << text2 << endl;\*/

/\*char\* text2 = text;

text2[0] = 'A';

cout << text << endl;

cout << text2 << endl;\*/

/\*int l = strlen(text);

strcpy\_s(text2, l + 1, text);

cout << "Copy is : "<<text2 << endl;\*/

//char\* text = new char[100]{};

//cout << "Enter name : ";

//cin.getline(text, 100);

//cout << "text is : " << text << endl;

//char\* text2 = new char[100]{};

//cout << "Enter surname : ";

//cin.getline(text2, 100);

//cout << "text is : " << text << endl;

////strcat\_s(text,strlen(text)+strlen(text2)+1,text2);

//mystrcat(text, text2);

//cout << "text is : " << text << endl;

/\*char\* t = new char[]{ "salam" };

cout << &t[2] << endl;\*/

/\*int a = getNumber("123");

char\* a = getNumber(123);\*/

}