// Devin Hardy

// Asg 1

// Attempt at the parcing problem

#define \_CRT\_SECURE\_NO\_WARNINGS

#include <iostream>

#include <cstring>

#include <string>

#include <algorithm>

char\* makeCStrg(std::string str)

{

char\* char\_array = new char[str.length() + 1];

char\_array[str.length()] = '\0';

for (int i = 0; i < str.length(); i++)

{

char\_array[i] = str[i];

}

return char\_array;

}

// [X] string to c-string

// [?] splits the c-string into tokens

// [?] have pointers to tokens

// [?] pointer at pointers

// special characters '<', '>', '<<', '>>', '|' = white space

// return a dynamiclly allocated array of c-strings

// double pointer is an array of something

char\*\* parseCommandLine(std::string aCommandLine)

{

int M = 10;

int i = 0;

const char delim[] = { '<', '>', '<<', '>>', '|', ' '};

char\* cStrg = makeCStrg(aCommandLine);

char\* token = strtok(cStrg, delim);

char\*\* pntr = new char\* [M]; // pointer array of 5

while (token!=NULL) // get the rest of the tokens

{

pntr[i] = token; //

i++;

token = strtok(NULL, delim);

}

pntr[i] = NULL;

return pntr; // return pointer

}

// So far string into a c string

int main()

{

std::string example = "example<line|of code >>no promise it works";

char\*\* tokens = parseCommandLine(example);

int itr = 0;

while (tokens[itr] != NULL)

{

std::cout << tokens[itr] << std::endl;

itr++;

}

std::cout << std::endl;

std::cout << "I have no clue what the parse commands will actually look like" << std::endl;

std::cout << "but I figured that my example will do okay for now." << std::endl;

return 0;

}

// Run program: Ctrl + F5 or Debug > Start Without Debugging menu

// Debug program: F5 or Debug > Start Debugging menu

// Tips for Getting Started:

// 1. Use the Solution Explorer window to add/manage files

// 2. Use the Team Explorer window to connect to source control

// 3. Use the Output window to see build output and other messages

// 4. Use the Error List window to view errors

// 5. Go to Project > Add New Item to create new code files, or Project > Add Existing Item to add existing code files to the project

// 6. In the future, to open this project again, go to File > Open > Project and select the .sln file