This is the documentation. The comments in the source code explain everything.

Also the executable would have been in the script file, but I had errors in my source code that did not allow it to run.

#include <iostream>

#include <string>

using namespace std;

int main(int s,char\* url\_arr[]) {

//puts the string url into an array

string url = url\_arr[1];

//array of valid protocols

string protocols[] = {"http","https","ftp","ftps"};

//looks for the protocol within the url

string checkProtocols = url.substr(0,url.find("://"));

//checking protocol validity

for (int i=0; i<4; i++)

{

if(checkProtocols == protocols[i])

{

cout << "Protocol: " + checkProtocols << endl;

break;

}

if (i == 3)

{

cout << "Protocol: " + checkProtocols + " is not a valid protocol" << endl;

return 1;

}

}

//URL variable without the protocol

string urlNoProto = url.substr(url.find("://")+3);

//domain variable

string domain = urlNoProto.substr(0, urlNoProto.find('/'));

//port variable

int port = stoi(domain.substr(domain.find(':')+1));

//printing domain

domain = domain.substr(0, domain.find(':'));

cout << "Domain: " + domain << endl;

//checking for port validity

if (port >1 && port < 65535)

{

cout << "Port: " << port << endl;

}

else

{

cout << "Port: port number must be between 1 and 65535" << endl;

}

//filepath

string afterDom = urlNoProto.substr(urlNoProto.find('/')+1);

string filePath = afterDom.substr(0, afterDom.find('?'));

cout << "File Path: " << filePath << endl;

//parameters

string param = afterDom.substr(afterDom.find('?')+1);

cout << "Parameters: " << param <<endl;

return 0;

}