Analysis of the problem

1. The only thing that the program requires is for the user to input a string and then press the enter key.
2. The data available is the string will have its words reversed via input into a stack.
3. The only output was to have the program output the string with the words in reverse order. There are additional lines outputted for demonstration purposes.

The algorithm

The algorithm from 12.8 was used. There were difficulties at first with how to transfer in strings. The program ended up taking every char as a node in the stack. Then, a for loop was used to output into a new string. The entire string was then checked for separate words and flipped the words themselves back into the correct order. The word’s place in the sentence is tracked

k = 0;

s = 0;

s = i - k;

and pushed again onto the stack. A separate if statement was used for the last word in the string because there were no additional whitespaces.

User Documentation.

To run the submitted project, you will first need to extract the contents of the submitted archive by right-clicking on the file, select extract all, and then select the extract button. Then you will need to open your copy of visual studio, go to file, open, and then select project/solution. Locate the folder that you just extracted, open the mod4\_3 folder and open mod4\_3.sln file. Once open go to the solution explorer, click on the triangle to the left of source files, and select mod4\_3.c. Once you see the code on the screen, hold the ctrl button down on the keyboard and press F5. This will launch the application. Follow the on screen prompts.