Analysis of the problem

1. The program takes in -a, -d or no argument and then executes a block of code according to the argument passed in.
2. A precompiled unsorted list is provided by the program, and the user will know to input either -a for an ascending sorted list, or -d for a descending sorted list.
3. There is no specification on the output. A simple print of before and after would really be required to see results.

The algorithm

When the user, from a command line, inputs the argument, the program first determines that, if no arguments were passed, it prints that nothing was passed and for the user to try again. The program will then compare the string containing the users selection to “-a” or “-d” and works the according sort.

if (strcmp(argv[1], "-a") == 0)

or

if (strcmp(argv[1], "-d") == 0)

and then works the corresponding bubble sort.

User Documentation.

To view the submitted project code, 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 mod5\_2 folder and open mod5\_2.sln file. Once open go to the solution explorer, click on the triangle to the left of source files, and select mod5\_2.c.

To execute the code, you will need to use the command line. In windows, hold the windows key and press r to open the run command, type in cmd, and press enter. You should be located at c:\users\\*your username\*> you will need to type into the command line the location where you extracted the files to. On my computer, I have extracted the folder to my documents folder. So I typed in

Cd documents\mod5\_2\debug

to get to the folder containing the executable. You can then type

mod5\_2 -a

or

mod5\_2 -d

to get the program to run in either ascending or descending order.