Guide to the Solution

What is done

Required files

Board.h

Board.cpp

Command.h

Main.cpp

Tested with

puzzle1.txt

puzzle2.txt

puzzle6.tzt

puzzle6.txt (modified)

The function findPath() is important one that processed recursively (which is actual need of this assignment) It is defined in main.cpp at top

All the command line option combinations as given below are tested but in some cases it works and in some other cases it fails (when puzzle6.txt is little modified then the source given, it works-output files are attached)

Options and working status are

|  |  |  |
| --- | --- | --- |
| **Sl** | **Command Option** | **Status** |
| 1 | Command <source txt file> | Working but not properly |
| 2 | Command <source txt file> -all\_solutions | Working but not properly |
| 3 | Command <source txt file> -visualize | Terminates abnormally |
| 4 | Command <source txt file> -max\_moves <move count> | Working pretty good |
| 5 | Command <source txt file> -max\_moves <move count> -all\_solutions | Working pretty good |
| 6 | Command <source txt file>-max\_moves <move count> -visualize | Working for smaller size |

Most of the code are taken from the source files (board.h, board.cpp) supplied with the assignment but little modified accordingly.

New functions are added to perform in main.cpp

A new header file named command.h is added and a structure defined inside that

Loopholes and further rectification required

Solutions are done but it fails to react to, and further rectification may required

-big size boards

-visualization works but not directly, it works when max\_moves parameter is taken

-visualize option terminates in plain

-all\_solutions works with max\_moves too

-simple solutions gives wrong result

Test outputs are attached with this solution.