

Jeff Morton
Data Structures and Algorithms 2
Project 3
User Manual

Setup and Compilation

1. Download and unzip the submission file.
2. The files included in the submission are:
 - Graph.c
 - Graph.h
 - Main.c
 - Maze.c
 - Maze.h
 - FunctionalDecomposition.docx
 - UserManual.docx (this file)
3. This program has been confirmed to work on Windows and most Linux builds.
4. To compile the program, type make at the command line when you are navigated to the folder the submission was extracted to.

No command line arguments are required or checked. When run, the program will prompt the user for the size of the maze they desire (this number must be a perfect square) or -1 to exit. If the user enters a number other than -1 or a perfect square, the program will repeat the prompt. Any time the user enters a perfect square, a maze will be generated, drawn to the screen, and outputted in the same format to Maze.txt. A maze image will also be output in PPM format to Maze.ppm. Output will be similar to the following:

Please enter the number of nodes in the graph(maze, must be a perfect square) or -1 to exit: 16

```
*  * * * * *
*
* * *  * * * *
*  *  *      *
*  *  * * *  *
*
*      *  *
* * * * *  *  *
*
*      *
* * * * * *
*      *
```

Please enter the number of nodes in the graph(maze, must be a perfect square) or -1 to exit: -1