

## How to use the program

### Folder set up

It's very important the folders are set up correctly, or the program will not run.

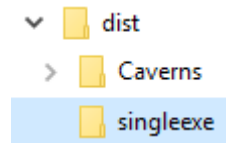
Apart from “Caverns” folder names are unimportant.

A containing folder is needed (here named dist).

This container needs a folder called “Caverns” and another folder for the exe file.

Inside “Caverns” is where “input.cav” must go.

Inside the other folder (here: singleexe) is where the executable file must go.



*Example folder layout*

### Using the program

The program has three usable buttons:

1. Step forward
2. Jump to end
3. Reset

Step forward – Will cause the algorithm to advance one step

Jump to end – Will cause the algorithm to finish the search and display the resultant path. Can be used either at the start, or after any number of steps.

Reset – Resets the program back to a completely unsolved graph.

### Information

On the right is the queue. This shows the nodes in the queue, and the shortest distance from them to the start.

On the left is the key, this describes the colour based information found as the algorithm progresses.

- Start – The starting node
- Goal – The goal node
- Selected – The node currently being visited/adding nodes to the queue
- Visited – A node that has been visited
- Examined – A node in the queue
- Route (replaces selected) – The route between the start and goal node