

# Maze

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# Problem Statement

- A person placed at  $(0, 0)$  in a square matrix of order  $N \times N$ , has to reach the destination at  $(n-1, n-1)$
- Find a possible path that the person can take to reach from source to destination

# Problem Statement

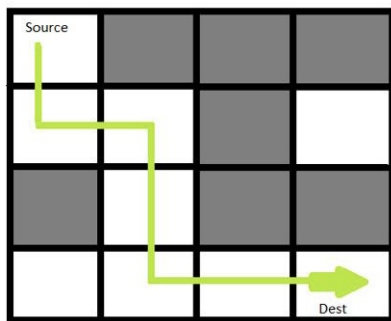


Figure: Maze Example

# Approach

- Start from the source
- Move in a direction where the path is not blocked (not 0)
- Reach the destination within the time limit to win the game

# Statistics

- Lines of Code - 203
- Number of functions - 12

# Tools

- OS - Windows 10
- Programming language (Python Version 3.8.1)
- Libraries - numpy, pygame
- Modules - random, mixer, sys

# Learnings

- Backtracking
- Generating random matrices
- Embedding Audio
- Usage of pygame
- Implementing timer
- Working on GIT and Latex

# Challenges

- Icon movement
- Path color generation
- Exiting game window
- GIT - pushing files to gitlab



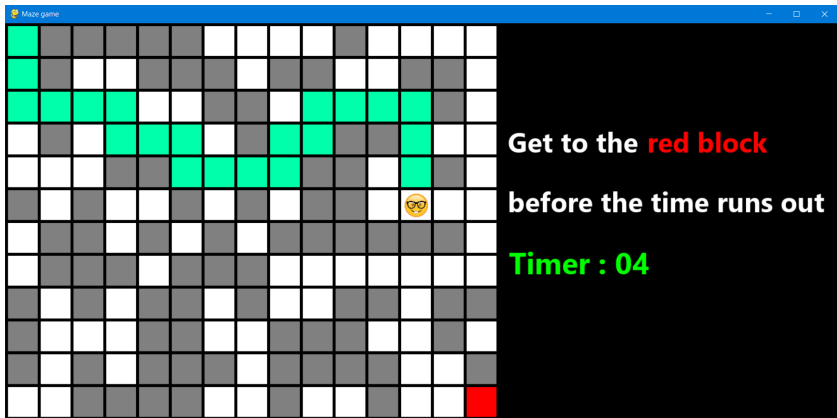
# GIT Repo

`https://gitlab.com/19wh1a0507/maze`

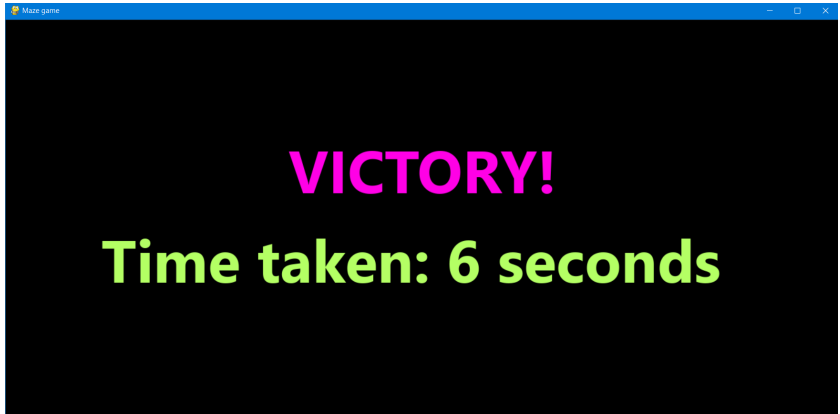
The screenshot shows the GitLab web interface for a project named 'Maze'. The top navigation bar includes the GitLab logo, 'Projects', 'Groups', and 'More' dropdowns, along with a search bar and user profile icons. The left sidebar contains a navigation menu with options like 'Project overview', 'Details', 'Activity', 'Releases', 'Repository', 'Issues', 'Merge Requests', 'CI/CD', 'Security & Compliance', 'Operations', 'Packages & Registries', 'Analytics', 'Wiki', 'Snippets', and a 'Collapse sidebar' button. The main content area displays the project 'Maze' with its ID '25451351'. It shows statistics: 48 Commits, 1 Branch, 0 Tags, 276 KB Files, and 276 KB Storage. Below this is a commit history section with a dropdown for 'master' and a '+ v' button. A recent commit is shown: 'Delete maze\_demo1.jpg' by Donuru Nidhi, authored 19 seconds ago, with commit hash 'd8f71f37'. Below the commit list are buttons for 'README', 'Add LICENSE', 'Add CHANGELOG', 'Add CONTRIBUTING', 'Enable Auto DevOps', and 'Add Kubernetes cluster'. At the bottom, there is a table listing repository files and their last commit details.

Name	Last commit	Last update
Code	Update maze_game.py	18 hours ago
Notes	Update notes.txt	16 minutes ago
PptLatexCode	Update maze_latex.tex	17 hours ago
images	Upload New File	2 minutes ago
README.md	Update README.md	47 seconds ago

# Demo



# Demo



THANK YOU