

# MAZE SOLVER

(Python project)

Name:NAMBI RAMANAN S

Batch :H.J.Bhaba

## Tables of contents:

- 1.Introduction
- 2.Python files
- 3.Key Features
- 4.Launguage Used
- 5.Future aspect

## 1.Introduction:

The objective of the project is creating the maze by the square matrix.Generate the path to reach the end of the maze.if it solvable put the output in the outputfile and unsolvable,it should return -1 as the only value in the output using command line arguments.

## 2.Python files:

**1.main.py:** This is the file which has to run on terminal to see interactive commands as well a automatic commands.

**2.Maze\_Solver.py:** This file consists of all the method for indentify the path to reach the end of the maze by moving up,down, right and left. And this file contain the method for remove the longest path and identify the shortest path then return the result to the output file.

## 3.Key features:

- a) 0 are in the matrix denoted as no path,
- b)1 is in the matrix denoted as path.

c)there is no path return -1.

This is done in two processes

1.By providing with an interactive command prompt based shell where commands can be typed in

2.By accepting a filename "Inputfile.txt" as a parameter at terminal and read the commands from "file"

#### **4.Launguage Used:**

The programming language is used python 3.9.05

#### **5.Future aspects:**

I will add front end to this code

Also use tkinter to make a GUI Program