

## Deployment Instructions:

- 1) Framework: Pygame
- 2) Algorithm: Backtracking Algorithm

### Algorithm Illustration:

- If we reach the Destination:
  - It should return an array containing only the position of the destination
- else
  - Move in the forwards direction and check if there is a solution. Let's call this '1'
  - In case there is no solution, we move down. Let's call this '2'
  - if either of the two above options work, we add the current position to the solution obtained at either '1' or '2'. Let's call this '3'

### Maze Creation:

The code creates a random  $N \times N$  maze where  $N$  is a variable that can be input by the user. The starting point is indicated with a red color whereas the destination point is indicated with a blue color. The color black represents a block whereas the white color represents a legit path. Using the maze solver method described above, in case there is a path from source to destination, the entire path is highlighted with a blue color.