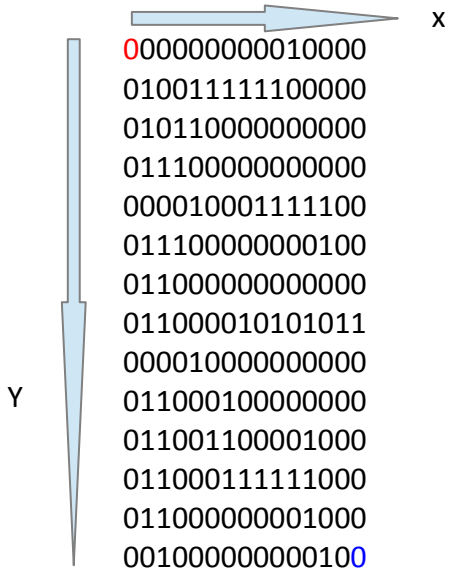
Data Structure Homework D : Stacks and Queues

- Title: Rat in a maze
- Objective
  - Implement a stack function
  - Utilize stacks to solve a problem for a rat out of a maze
  - Use a structure type to solve this problem
- Descriptions
  - Read maze.txt to build a maze for a rat.
  - Maze was constructed by 15 * 15 matrices. zeros represent the open path and ones are barriers.

E.g. maze.txt



  - Start is (0, 0), the destination is (14, 14) (the vertical axis is the y axis, the horizontal axis is the x axis)
  - Use a stack to solve this problem.
  - You must follow this direction sequence : Right > Down > Up > Left
  - You must output a result.txt including a full path.
    e.g. result.txt

    0,0
    0,1
    0,2
    .
    .
    14,12
    14,13
    14,14
  - Read maze.txt from your project folder and output result.txt into the same folder.
- Grade policies
  - 5% - Source code can be compiled without any error
  - 15% - readme file, code style, and comments in source code
  - 80% - result correctness (result.txt)
- Turn in
  - System
    - Turn in files to the workstation : csie0.cs.ccu.edu.tw

- Command: turnin ds.hwD [files…]
- This source code will be compiled and tested on the workstation

- Source code
  - Source code with appropriate comments
- Report
  - A document named “readme.txt” or “readme.doc” or “readme.pdf”. You should describe the details of your project in your readme file