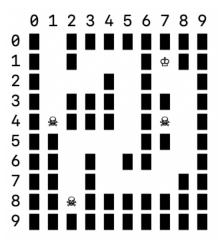
CSCI-101 Programming 1

Week of Nov 7 - Lab 12c

INSTRUCTIONS

Inside your Lab12 directory add a class named MazeGenerator that contains the following.

- I. A **private** and **static** field named **kb** that holds a reference to a **Scanner** that is initialized to read from the keyboard.
- II. A **private** and **static** field named **maze** that holds a reference to a 2D array of **Cell** elements and is initialized to null.
- III. A method named **printMenu** that prints to the screen the following menu:
 - [1] Load
 - [2] New
 - [3] Edit
 - [4] Save
 - [5] Exit
 - Choose an option:
- IV. A method named **printMaze** that prints the contents of **maze** to the screen as follows.
 - I. The top row contains the column numbers
 - II. Each row displays the row number followed by the glyphs of each cell in the row with spaces between them



- V. A method named **loadMaze** that does the following:
 - Asks the user to enter a file name and reads the file name from the keyboard.
 - Creates a Scanner that can read from the file.
 - Configures the Scanner to use commas and newline characters as delimiters.
 - · Reads the number of rows and columns from the file.
 - Sets **maze** equal to a new 2D array of **Cell** elements having the same number of rows and columns as the values read from the file.
 - For each code value read from the file, the program sets the corresponding element in maze equal to a new a new Cell element whose code field is equal to the value read from the file.
 - After all of the elements in maze have been initialized, the method calls printMaze.

- VI. A method named **main** that repeatedly does the following until the user presses 5 to exit:

 - Calls printMenu to print the menu to the screen.
 Read user's choice from the keyboard.
 If the users enter's 1 then the program calls loadMaze.