

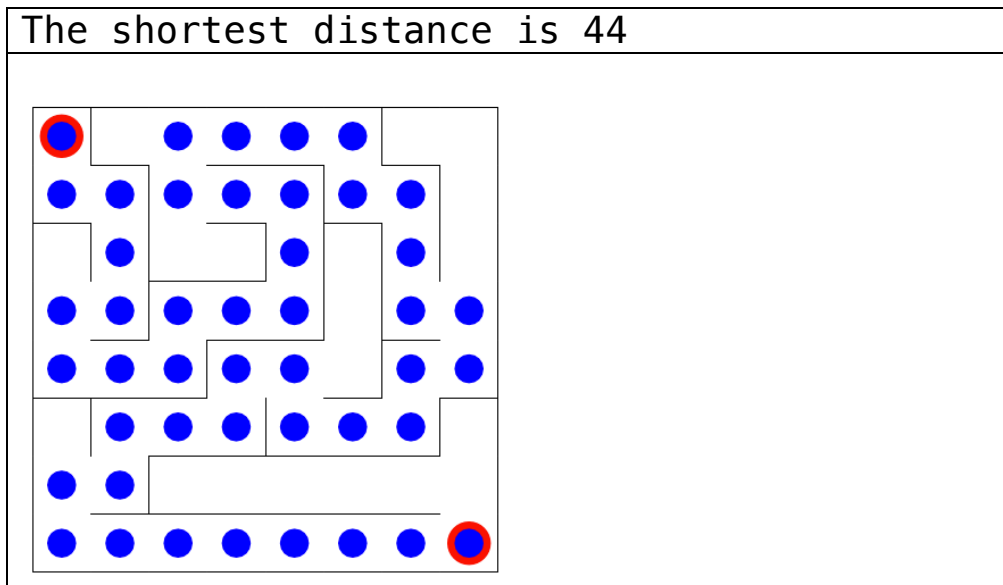
CS2300 Assignment 5 (50 points)

Due Date: 11/18 (11:59pm)

Description and Requirement: Congratulations, this is your last programming assignment on CS2300. In this assignment, you are going to write a Java program to implement a breadth First Search on a graph using a *linked list representation* and to find the shortest distance between the starting position (1, n) and the end position (n, 1). Similar to Assignment 1, you need to put the BLUE dot on the path.

Your program should consist of two main methods – buildGraph and BFS.

Expected Result for maze8.txt may look like the following



To Compile: >> javac Maze.java StdDraw.java

To run: >> java Maze maze16.txt

Grading:

Submit your source files along with a readme indicating how to compile your files via blackboard.

Successfully compile and link (10 points)

Correctly compute the shortest distance (10 points)

Correctly identify the path from the starting point to the end point (30 points)

**** You may use `java.util.LinkedList`, `java.util.Queue` and/or `java.util.Stack` ****