

## **Junior Knights Contest Course Spring 2024 2/10/2024 – Outline**

### I. Lecture Part I: Breadth First Search on a 1D or 2D Grid

- A. Identifying Connected Components
- B. Getting Shortest Distance from one spot to another in a grid.

Elevator Trouble: <https://open.kattis.com/problems/elevatortrouble>

Counting Stars: <https://open.kattis.com/problems/countingstars>

#### Challenge Problem

Grid: <https://open.kattis.com/problems/grid>

### II. Break

### III. Lecture Part II: Breadth First Search on a Graph

- A. How to Store a Graph
- B. Canonical Code

### V. Practice Problems:

Horror List: <https://open.kattis.com/problems/horror>

On Average They're Purple: <https://open.kattis.com/problems/onaveragetheyrepurple>