**CSE221: Algorithms**

**Lab 05**

**Spring 2025**

**Assignment 05:**

**codeforces Invitation Link:** <https://codeforces.com/contestInvitation/8aec6253c73fd60ef4df8fb4a79e5b927acaa3ce>

Alternative Link: <https://codeforces.com/contests/603110>

[The alternative link will only work after you have successfully registered using the first link.]

Deadline: 11:59 pm, April 20, 2025

**No submission will be considered after the deadline ends.**

### **Learning Outcome:**

Upon successful completion of this lab, students will have a solid understanding of graph and grid traversal techniques. They will be able to apply fundamental concepts such as graph traversal, cycle detection, shortest path finding, and flood fill in practical problem-solving scenarios. The lab strengthens algorithmic thinking and equips students to effectively translate between theoretical graph models and practical implementations in code.