David Schulz

Hailey Hable

Urhum Sheikh

CS 4981 021

3/15/2022

**Lab 1 Report**

Flood It

* Document what the problem is asking for in your own words.
* Describe the algorithm and data structure you used to solve (or attempt to solve) the problem.
* Save the output from your last submission to Kattis (e.g. a screenshot of the web interface) for your last submission during the lab competition.
* What is the runtime complexity and memory complexity of your solution?
* What optimizations (if any) did you implement?
* How did other programming languages (if used) affect your submission results?

Cinema Crowds

* Document what the problem is asking for in your own words.
* Describe the algorithm and data structure you used to solve (or attempt to solve) the problem.
* Save the output from your last submission to Kattis (e.g. a screenshot of the web interface) for your last submission during the lab competition.
* What is the runtime complexity and memory complexity of your solution?
* What optimizations (if any) did you implement?
* How did other programming languages (if used) affect your submission results?

Popularity Contest

* Document what the problem is asking for in your own words.
* Describe the algorithm and data structure you used to solve (or attempt to solve) the problem.
* Save the output from your last submission to Kattis (e.g. a screenshot of the web interface) for your last submission during the lab competition.
* What is the runtime complexity and memory complexity of your solution?
* What optimizations (if any) did you implement?
* How did other programming languages (if used) affect your submission results?

Flow Layout

* Document what the problem is asking for in your own words.
* Describe the algorithm and data structure you used to solve (or attempt to solve) the problem.
* Save the output from your last submission to Kattis (e.g. a screenshot of the web interface) for your last submission during the lab competition.
* What is the runtime complexity and memory complexity of your solution?
* What optimizations (if any) did you implement?
* How did other programming languages (if used) affect your submission results?