Programming Contest Problems for Week Twelve

Please work on some of these fun programming contest problems during the lab session while waiting to be interviewed on your assignment. To earn your participation marks for the lab, you should work together in a small team of two or three students.

To be able to submit solutions, you will need to make a Codeforces account here: `http://codeforces.com/register`.

Important - Dijkstra's Algorithm

If you STILL haven't implemented Dijkstra's algorithm, please do it!

1. Codeforces 20C - Dijkstra: `http://codeforces.com/problemset/problem/20/C`

Dynamic Programming with a Graph

Try this graph problem that involves using dynamic programming to reduce repeated work.

1. Codeforces 615B - Longtail Hedgehog: `http://codeforces.com/problemset/problem/615/B`

Divide and Conquer

Try this divide-and-conquer problem! What technique for string processing have you learned that might help you solve this problem fast enough? (You need to compare lots of substrings quickly!)

1. Codeforces 559B - Equivalent Strings: `http://codeforces.com/problemset/problem/559/B`

Maximum Network Flow

Try to figure out how to model this problem using network flow. Once you have it figured out, try to implement the Ford-Fulkerson algorithm and solve it!

1. Codeforces 546E - Soldier and Travelling: `http://codeforces.com/problemset/problem/546/E`