Code Jam 2016 - Round 3

Analysis: Rebel Against The Empire

The intended solution is roughly as follows:

- Treat it at a graph problem. We have a graph with N nodes, and each edge is available in an interval of time.
- For each node, order the edges by, say, availability start time. As long as we have at least one edge available, we can jump back and forth. And, obviously we can arrive on an asteroid only when there's at least one edge open. So, there are "gaps" such that you need to leave the asteroid between the gap, because there will be no edges in between. So, we can split each node into multiple nodes across these gaps (note that the number of edges doesn't grow, so the size of the whole graph is still O(N^2)).
- Now we run a Dijkstra's on the new graph. When we arrive in a node, we can only take the outgoing edges which haven't been closed yet (and the time at which we take them is the max of the current time and the time in which they open).
- Done.