

Lab 8 Continued

Let Supervisor X be the one with the earliest departure time from the water-cooler. Every solution must require us to pass by the cooler at some point during X 's stay there. There is clearly no reason to pass by any earlier than the last moment at which we can speak to X . From this idea we can develop the following algorithm:

1. Sort the supervisors according to departure time
2. Repeat
3. Visit the water-cooler at the departure time of the first supervisor in the list
4. Remove all supervisors from the list who are there when we visit
5. Until we have spoken to all supervisors

You should be able to prove that this algorithm always finds an optimal solution.