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Problem 1: Rentals Pseudocode and Efficiency Analysis

n(log(n))	sort(interval_list by start time)
(1)	add first interval to laptops list
(1)	remove first interval from interval_list
(n)	while (elements remaining in interval_list)
(m)	for (each element in laptops)
(1)	if (interval begins after laptop is free)
(1)	update laptop interval
(1)	remove interval from interval_list
(1)	if (not updated)
(1)	add interval to laptops list
(1)	remove interval from interval_list
(1)	output results

Step Count Efficiency Analysis: $O(n\log(n) + n*m + 9)$

Problem 2: Network Delay Time Pseudocode and Efficiency Analysis

(t)	for (each element in times)
(1)	if (element starts at source node)
(1)	solution is possible
(1)	if (solution not possible)
(1)	return -1
(t)	while (options left in times)
(p)	for (each tracked path)
(1)	if (current node is the start of the tracked path
(1)	tracked path move to next node
(1)	tracked time += current node time
(1)	remove current from times
(1)	add updated node to nodesVisited
(1)	if (new tracked path is needed)
(1)	add new tracked path starting at source with length 0
(n)	for (each possible node)
(1)	if (node is not in nodesVisited)
(1)	return -1
(p)	for (each tracked path)
(1)	if (path time > minTime)
(1)	minTime = path time
(1)	return minTime

Step Count Efficiency Analysis: $O(t*p + t + n + p + 16)$