

2root2
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ControlTower generates an initial group
of Passengers with destinations in a
given range to mimic a morning rush

ControlTower checks for available Elevators, which are
defined by having a timeToEnd of less than 6

Based on the destinations of the Passengers and the
number of elevators available, a range is decided for each
elevator, so that each Elevator's range is **at most one
away from any other Elevator's range**

Passengers are placed into the Elevator whose range
corresponds to the Passenger's destination

Elevators calculate their timeToEnd(), using the
Passengers' data

timeToDestination() is calculated for every Passenger by
successively removing each Passenger, and calculating
how many floors the Elevator must travel for the next
destination (simple addition)

timeToDestination for each passenger is logged in a file

Once timeToEnd is under 6, the Elevator becomes available for
more Passengers and **reassigning of its zone**

ControlTower continues sending
passengers as the workday
continues

