

Section 1: Analysis of console output

Event 1: One group of passengers requesting at a time

```
Time: 40 || 4 passengers enter the floor 4 and request to go to the
floor 0
// Passengers spawn on the correct floor (4) at correct time (40), requesting to floor 0.
// At time 40, elevator 3 detects the waiting passengers.
Time: 40 || Elevator 3 is heading to the floor 4 to pick up passengers
// Elevator 3 moves to floor 4 for pickup.
// No two elevators are heading to a floor for passenger pickup. Only Elevator 3 is
heading to floor 4 for pick up.
Time: 60 || Elevator 3 reaches to the floor 4 to pick up passengers
// Time = 40 + (floor 4 – floor 0) * 5 = 60
// Elevators only pick up passengers going up on a floor, then down if no passengers
need to go up. Currently there is no passenger going up, then the Elevator 3 picks up
passengers to go down.
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 4 -- Destination
floor: 0 -
// Elevator 3 picks up passengers successfully
Time: 60 || Elevator 3 is heading to the floor 0 to unload passengers
// Elevator 3 is heading to the floor 0 to drops off passengers
// Simulation state is consistent

.....

Time: 100 || Elevator 3 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 0 -- Number of
passengers: 4
// Elevator 3 drops off passengers successfully
// Time = 60 + (floor 4 – floor 0) * 5 + 20 = 100
```

Event 2: Multiple groups of passengers requesting at a time

```
//at time = 100
Time: 100 || 2 passengers enter the floor 0 and request to go to the
floor 4
// Passengers spawn on the correct floor (0) at correct time (100), requesting to floor 4.
Time: 100 || Elevator 0 is heading to the floor 0 to pick up passengers
// Elevator 0 moves to floor 0 for pickup.
// At time 100, elevator 0 detects the waiting passengers.
// No two elevators are heading to a floor for passenger pickup. Only Elevator 0 is
heading to floor 0 for pick up.
Time: 100 || Elevator 0 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 2 -- Destination
floor: 4 -
// Time = 100 + (floor 0 – floor 0) * 5 = 100
```

// Elevators only pick up passengers going up on a floor, then down if no passengers need to go up. Currently there is no passenger going up, and then the Elevator 0 picks up passengers to go down.

// Elevator 0 picks up passengers successfully

Time: 100 || Elevator 0 is heading to the floor 4 to unload passengers

//at the same time = 100

Time: 100 || Elevator 2 is heading to the floor 4 to pick up passengers

Time: 100 || 6 passengers enter the floor 4 and request to go to the floor 2

// Passengers spawn on the correct floor (4) at correct time (100), requesting to floor 2.

// Elevator 2 moves to floor 4 for pickup.

// At time 100, elevator 2 detects the waiting passengers.

// No two elevators are heading to a floor for passenger pickup. Only Elevator 2 is heading to floor 4 for pick up.

Event 3: Pick up multiple groups of passengers at a time and drop off from the closest floor

// Passengers spawn on the correct floor (4) at correct time (120), requesting to floor 0.

Time: 120 || 4 passengers enter the floor 4 and request to go to the floor 0

Time: 120 || Elevator 2 reaches to the floor 4 to pick up passengers

// Time = 100 + (floor 4 – floor 0) * 5 = 120

-- PICK UP -- Elevator ID: 2 -- Number of passengers: 6 -- Destination floor: 2 --

-- PICK UP -- Elevator ID: 2 -- Number of passengers: 4 -- Destination floor: 0 --

// Currently there is no passenger going up, and then the Elevator 0 picks up two groups passengers to go down.

// Elevator 2 picks up passengers successfully

Time: 120 || Elevator 2 is heading to the floor 2 to unload passengers

.....

// Time = 120 + (floor 4 – floor 2) * 5 + 20 = 150

Time: 150 || Elevator 2 reaches to the floor 2 to unload passengers

-- DROP OFF -- Elevator ID: 2 -- Current floor: 2 -- Number of passengers: 6 --

Time: 150 || Elevator 2 is heading to the floor 0 to unload passengers

// Elevator 2 drops off passengers at floor 2 first because floor 2 is closer than floor 0.

// Elevator 2 is heading to the floor 0 to drops off passengers

.....

// Time = 150 + (floor 2 – floor 0) * 5 + 10 = 150

Time: 170 || Elevator 2 reaches to the floor 0 to unload passengers

-- DROP OFF -- Elevator ID: 2 -- Current floor: 0 -- Number of passengers: 4

// Elevator 2 drops off passengers successfully

// Elevator 2 is idle now

Event 4: Pick up passengers who wants to go up first

```
// Passengers spawn on the correct floor (2) at correct time (600), requesting to floor 0.
// Passengers spawn on the correct floor (2) at correct time (600), requesting to floor 3.
Time: 600 || 5 passengers enter the floor 2 and request to go to the
floor 0
Time: 600 || 3 passengers enter the floor 2 and request to go to the
floor 3
Time: 600 || Elevator 3 is heading to the floor 2 to pick up passengers
// Elevator 3 detects the request. And only elevator 3 is heading to floor 2 to pick up

.....

Time: 605 || Elevator 3 reaches to the floor 2 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 3 -- Destination
floor: 3 --
Time: 605 || Elevator 3 is heading to the floor 3 to unload passengers
// Elevators only pick up passengers going up on a floor.
// Elevator 3 picks up passengers with destination floor 3 only.

.....

Time: 630 || Elevator 3 reaches to the floor 3 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 3 -- Number of
passengers: 3
// Time = 605 + (floor 3 – floor 2) * 5 + 20 = 630
// Elevator 3 drops off passengers successfully
// Elevator 3 is idle now
```

Final Simulation State:

Simulation State:

---- State for each floor in the Building ----

```
-- For the floor 0 --
The total number of passengers requesting elevator access on the
floor 0 : 35
The total number of passengers that exited an elevator on the
floor0 : 127
The current number of passengers waiting for an elevator on the
floor 0 : 0
No elevator is currently heading towards the floor 0 for passenger
pickup

-- For the floor 1 --
The total number of passengers requesting elevator access on the
floor 1 : 11
The total number of passengers that exited an elevator on the
floor1 : 2
The current number of passengers waiting for an elevator on the
floor 1 : 4
Elevator 4 is currently heading towards the floor 1 for passenger
pickup
```

```

-- For the floor 2 --
    The total number of passengers requesting elevator access on the
floor 2 : 32
    The total number of passengers that exited an elevator on the
floor2 : 69
    The current number of passengers waiting for an elevator on the
floor 2 : 7
    Elevator 3is currently heading towards the floor 2 for passenger
pickup

-- For the floor 3 --
    The total number of passengers requesting elevator access on the
floor 3 : 20
    The total number of passengers that exited an elevator on the
floor3 : 9
    The current number of passengers waiting for an elevator on the
floor 3 : 4
    Elevator 2is currently heading towards the floor 3 for passenger
pickup

-- For the floor 4 --
    The total number of passengers requesting elevator access on the
floor 4 : 166
    The total number of passengers that exited an elevator on the
floor4 : 22
    The current number of passengers waiting for an elevator on the
floor 4 : 10
    No elevator is currently heading towards the floor 4 for passenger
pickup

---- State for each elevator ----

-- For the Elevator 0 --
    The total number of passengers that entered the Elevator 0
throughout the simulation : 63
    The total number of passengers that exited the Elevator 0 on the
floor 0 : 32
    The total number of passengers that exited the Elevator 0 on the
floor 1 : 0
    The total number of passengers that exited the Elevator 0 on the
floor 2 : 23
    The total number of passengers that exited the Elevator 0 on the
floor 3 : 2
    The total number of passengers that exited the Elevator 0 on the
floor 4 : 4
    The current number of passengers in the Elevator 0 : 2

-- For the Elevator 1 --
    The total number of passengers that entered the Elevator 1
throughout the simulation : 53
    The total number of passengers that exited the Elevator 1 on the
floor 0 : 41
    The total number of passengers that exited the Elevator 1 on the
floor 1 : 0
    The total number of passengers that exited the Elevator 1 on the
floor 2 : 6

```

```
The total number of passengers that exited the Elevator 1 on the
floor 3 : 0
The total number of passengers that exited the Elevator 1 on the
floor 4 : 2
The current number of passengers in the Elevator 1 : 4

-- For the Elevator 2 --
The total number of passengers that entered the Elevator 2
throughout the simulation : 25
The total number of passengers that exited the Elevator 2 on the
floor 0 : 8
The total number of passengers that exited the Elevator 2 on the
floor 1 : 0
The total number of passengers that exited the Elevator 2 on the
floor 2 : 11
The total number of passengers that exited the Elevator 2 on the
floor 3 : 0
The total number of passengers that exited the Elevator 2 on the
floor 4 : 6
The current number of passengers in the Elevator 2 : 0

-- For the Elevator 3 --
The total number of passengers that entered the Elevator 3
throughout the simulation : 46
The total number of passengers that exited the Elevator 3 on the
floor 0 : 26
The total number of passengers that exited the Elevator 3 on the
floor 1 : 2
The total number of passengers that exited the Elevator 3 on the
floor 2 : 12
The total number of passengers that exited the Elevator 3 on the
floor 3 : 5
The total number of passengers that exited the Elevator 3 on the
floor 4 : 1
The current number of passengers in the Elevator 3 : 0

-- For the Elevator 4 --
The total number of passengers that entered the Elevator 4
throughout the simulation : 48
The total number of passengers that exited the Elevator 4 on the
floor 0 : 20
The total number of passengers that exited the Elevator 4 on the
floor 1 : 0
The total number of passengers that exited the Elevator 4 on the
floor 2 : 17
The total number of passengers that exited the Elevator 4 on the
floor 3 : 2
The total number of passengers that exited the Elevator 4 on the
floor 4 : 9
The current number of passengers in the Elevator 4 : 0
```

Section 2: Analysis of additional functions besides requirement in each class

ElevatorSimulation Class

```
public void readFile()
```

```
//In order to read information from the ElevatorConfig.txt  
//to create PassengerArrivals objects into the ArrayList of ArrayLists of  
PassengerArrivals object for each floor.
```

BuildingManager Class

```
public synchronized void setArrival(int currentFloor, int numPassengers, int Dest)  
//update the floor info when there are new PassengerArrival  
//used in the ElevatorSimulation
```

```
public synchronized int getPickupFloor(int elevatorID)  
//check whether there exists a floor with passenger requests  
//if there does, then return that floor  
//if there doesn't, then return -1
```

BuildingFloor Class

```
public void setPassengerArrival(int numPassengers, int dest)  
//update the floor info when there are new PassengerArrival  
//used in the BuildingManager
```

```
public int sumOfTotalRequests()  
//sum up the total number of passengers requesting elevator access on this floor
```

```
public int sumOfArrival()  
//sum up the total number of passengers that exited an elevator on the floor
```

```
public int sumOfRequests()  
//sum up the total number of passengers currently requesting elevator access on this  
floor
```

Elevator Class

```
public void updateTotalPassengerDestinations(int floor, int numPassenger)
//keep track the total passenger destination for one specific floor

public void run()
//All the logic is in this function.
//Including creating ElevatorEvents, managing the moveQueue, updating its current
state, updating the state of related floor.
```

Attachment: Complete console output

```
Time: 40 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 40 || Elevator 3 is heading to the floor 4 to pick up passengers
Time: 60 || Elevator 3 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 60 || Elevator 3 is heading to the floor 0 to unload passengers
Time: 80 || Elevator 4 is heading to the floor 4 to pick up passengers
Time: 80 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 100 || Elevator 4 reaches to the floor 4 to pick up passengers
Time: 100 || Elevator 0 is heading to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 100 || Elevator 0 reaches to the floor 0 to pick up passengers
Time: 100 || Elevator 4 is heading to the floor 0 to unload passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 2 -- Destination
floor: 4 --
Time: 100 || Elevator 0 is heading to the floor 4 to unload passengers
Time: 100 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 100 || Elevator 2 is heading to the floor 4 to pick up passengers
Time: 100 || 6 passengers enter the floor 4 and request to go to the
floor 2
Time: 100 || Elevator 3 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 0 -- Number of
passengers: 4
Time: 120 || Elevator 2 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 6 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 120 || Elevator 2 is heading to the floor 2 to unload passengers
```

Time: 120 || 4 passengers enter the floor 4 and request to go to the floor 0
Time: 140 || Elevator 0 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 4 -- Number of passengers: 2
Time: 140 || Elevator 4 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 0 -- Number of passengers: 4
Time: 150 || Elevator 2 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 2 -- Number of passengers: 6
Time: 150 || Elevator 2 is heading to the floor 0 to unload passengers
--
Time: 160 || Elevator 0 is heading to the floor 4 to pick up passengers
Time: 160 || Elevator 0 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination floor: 0 --
Time: 160 || Elevator 0 is heading to the floor 0 to unload passengers
Time: 160 || 4 passengers enter the floor 4 and request to go to the floor 0
Time: 170 || Elevator 2 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 0 -- Number of passengers: 4
Time: 200 || Elevator 4 is heading to the floor 0 to pick up passengers
Time: 200 || 2 passengers enter the floor 0 and request to go to the floor 4
Time: 200 || Elevator 4 reaches to the floor 0 to pick up passengers
Time: 200 || Elevator 3 is heading to the floor 1 to pick up passengers
Time: 200 || 1 passengers enter the floor 1 and request to go to the floor 4
Time: 200 || Elevator 1 is heading to the floor 2 to pick up passengers
Time: 200 || 5 passengers enter the floor 2 and request to go to the floor 0
Time: 200 || 4 passengers enter the floor 3 and request to go to the floor 0
Time: 200 || 6 passengers enter the floor 4 and request to go to the floor 2
Time: 200 || 4 passengers enter the floor 4 and request to go to the floor 0
Time: 200 || Elevator 2 is heading to the floor 3 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 2 -- Destination floor: 4 --
Time: 200 || Elevator 4 is heading to the floor 4 to unload passengers
Time: 200 || Elevator 0 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of passengers: 4
Time: 200 || Elevator 0 is heading to the floor 4 to pick up passengers
Time: 205 || Elevator 3 reaches to the floor 1 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 1 -- Destination floor: 4 --
Time: 205 || Elevator 3 is heading to the floor 4 to unload passengers
Time: 210 || Elevator 1 reaches to the floor 2 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 5 -- Destination floor: 0 --
Time: 210 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 215 || Elevator 2 reaches to the floor 3 to pick up passengers


```
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 215 || Elevator 2 is heading to the floor 0 to unload passengers
Time: 220 || Elevator 0 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 6 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 220 || Elevator 0 is heading to the floor 2 to unload passengers
Time: 240 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 5
Time: 240 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 240 || Elevator 3 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 4 -- Number of
passengers: 1
Time: 240 || Elevator 4 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 4 -- Number of
passengers: 2
Time: 240 || Elevator 1 is heading to the floor 4 to pick up passengers
Time: 250 || Elevator 0 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 2 -- Number of
passengers: 6
Time: 250 || Elevator 0 is heading to the floor 0 to unload passengers
--
Time: 250 || Elevator 2 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 0 -- Number of
passengers: 4
Time: 260 || Elevator 1 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 260 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 270 || Elevator 0 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of
passengers: 4
Time: 280 || Elevator 3 is heading to the floor 4 to pick up passengers
Time: 280 || Elevator 3 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 280 || Elevator 3 is heading to the floor 0 to unload passengers
Time: 280 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 300 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 4
Time: 300 || Elevator 0 is heading to the floor 0 to pick up passengers
Time: 300 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 300 || Elevator 0 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 5 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 2 -- Destination
floor: 4 --
Time: 300 || 5 passengers enter the floor 0 and request to go to the
floor 2
Time: 300 || Elevator 0 is heading to the floor 2 to unload passengers
```

Time: 300 || Elevator 4 is heading to the floor 4 to pick up passengers
Time: 300 || Elevator 4 reaches to the floor 4 to pick up passengers
Time: 300 || 2 passengers enter the floor 4 and request to go to the floor 3
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 2 -- Destination floor: 3 --
Time: 300 || Elevator 4 is heading to the floor 3 to unload passengers
Time: 300 || Elevator 1 is heading to the floor 4 to pick up passengers
Time: 300 || 6 passengers enter the floor 4 and request to go to the floor 2
Time: 320 || Elevator 1 reaches to the floor 4 to pick up passengers
Time: 320 || 4 passengers enter the floor 4 and request to go to the floor 0
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 6 -- Destination floor: 2 --
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination floor: 0 --
Time: 320 || Elevator 1 is heading to the floor 2 to unload passengers
Time: 320 || Elevator 3 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 0 -- Number of passengers: 4
Time: 325 || Elevator 4 reaches to the floor 3 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 3 -- Number of passengers: 2
Time: 330 || Elevator 0 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 2 -- Number of passengers: 5
Time: 330 || Elevator 0 is heading to the floor 4 to unload passengers
--
Time: 350 || Elevator 1 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 2 -- Number of passengers: 6
Time: 350 || Elevator 1 is heading to the floor 0 to unload passengers
--
Time: 350 || Elevator 0 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 4 -- Number of passengers: 2
Time: 360 || Elevator 4 is heading to the floor 4 to pick up passengers
Time: 360 || 4 passengers enter the floor 4 and request to go to the floor 0
Time: 365 || Elevator 4 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 4 -- Destination floor: 0 --
Time: 365 || Elevator 4 is heading to the floor 0 to unload passengers
Time: 370 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of passengers: 4
Time: 400 || Elevator 1 is heading to the floor 0 to pick up passengers
Time: 400 || 2 passengers enter the floor 0 and request to go to the floor 4
Time: 400 || Elevator 1 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 2 -- Destination floor: 4 --
Time: 400 || Elevator 2 is heading to the floor 1 to pick up passengers
Time: 400 || Elevator 1 is heading to the floor 4 to unload passengers
Time: 400 || 1 passengers enter the floor 1 and request to go to the floor 4

```

Time: 400 || 5 passengers enter the floor 2 and request to go to the
floor 0
Time: 400 || 4 passengers enter the floor 3 and request to go to the
floor 0
Time: 400 || 6 passengers enter the floor 4 and request to go to the
floor 2
Time: 400 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 400 || Elevator 3 is heading to the floor 2 to pick up passengers
Time: 400 || Elevator 0 is heading to the floor 3 to pick up passengers
Time: 405 || Elevator 2 reaches to the floor 1 to pick up passengers
Time: 405 || Elevator 0 reaches to the floor 3 to pick up passengers
Time: 405 || Elevator 4 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 0 -- Number of
passengers: 4
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 1 -- Destination
floor: 4 --
Time: 405 || Elevator 4 is heading to the floor 4 to pick up passengers
Time: 405 || Elevator 2 is heading to the floor 4 to unload passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 405 || Elevator 0 is heading to the floor 0 to unload passengers
Time: 410 || Elevator 3 reaches to the floor 2 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 5 -- Destination
floor: 0 --
Time: 410 || Elevator 3 is heading to the floor 0 to unload passengers
Time: 425 || Elevator 4 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 6 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 425 || Elevator 4 is heading to the floor 2 to unload passengers
Time: 440 || Elevator 0 reaches to the floor 0 to unload passengers
Time: 440 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 440 || Elevator 1 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 4 -- Number of
passengers: 2
Time: 440 || Elevator 3 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 0 -- Number of
passengers: 5
Time: 440 || Elevator 2 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 4 -- Number of
passengers: 1
-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of
passengers: 4
Time: 440 || Elevator 1 is heading to the floor 4 to pick up passengers
Time: 440 || Elevator 1 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 440 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 455 || Elevator 4 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 2 -- Number of
passengers: 6
Time: 455 || Elevator 4 is heading to the floor 0 to unload passengers
--
Time: 475 || Elevator 4 reaches to the floor 0 to unload passengers

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```

-- DROP OFF -- Elevator ID: 4 -- Current floor: 0 -- Number of
passengers: 4
Time: 480 || Elevator 0 is heading to the floor 4 to pick up passengers
Time: 480 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 480 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 4
Time: 500 || Elevator 2 is heading to the floor 0 to pick up passengers
Time: 500 || Elevator 0 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 500 || Elevator 0 is heading to the floor 0 to unload passengers
Time: 500 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 500 || 3 passengers enter the floor 1 and request to go to the
floor 0
Time: 500 || Elevator 1 is heading to the floor 1 to pick up passengers
Time: 500 || Elevator 3 is heading to the floor 2 to pick up passengers
Time: 500 || 2 passengers enter the floor 2 and request to go to the
floor 1
Time: 500 || 6 passengers enter the floor 4 and request to go to the
floor 2
Time: 500 || Elevator 4 is heading to the floor 4 to pick up passengers
Time: 505 || Elevator 1 reaches to the floor 1 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 3 -- Destination
floor: 0 --
Time: 505 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 510 || Elevator 3 reaches to the floor 2 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 2 -- Destination
floor: 1 --
Time: 510 || Elevator 3 is heading to the floor 1 to unload passengers
Time: 520 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 520 || Elevator 2 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 2 -- Destination
floor: 4 --
Time: 520 || Elevator 2 is heading to the floor 4 to unload passengers
Time: 520 || Elevator 4 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 6 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 520 || Elevator 4 is heading to the floor 2 to unload passengers
Time: 530 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 3
Time: 535 || Elevator 3 reaches to the floor 1 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 1 -- Number of
passengers: 2
Time: 540 || Elevator 0 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of
passengers: 4
Time: 550 || Elevator 4 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 2 -- Number of
passengers: 6

```

Time: 550 || Elevator 4 is heading to the floor 0 to unload passengers
--
Time: 560 || Elevator 2 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 4 -- Number of
passengers: 2
Time: 560 || Elevator 1 is heading to the floor 4 to pick up passengers
Time: 560 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 570 || Elevator 4 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 0 -- Number of
passengers: 4
Time: 580 || Elevator 1 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 580 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 600 || Elevator 2 is heading to the floor 0 to pick up passengers
Time: 600 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 600 || 5 passengers enter the floor 0 and request to go to the
floor 2
Time: 600 || Elevator 4 is heading to the floor 1 to pick up passengers
Time: 600 || 1 passengers enter the floor 1 and request to go to the
floor 4
Time: 600 || Elevator 3 is heading to the floor 2 to pick up passengers
Time: 600 || 5 passengers enter the floor 2 and request to go to the
floor 0
Time: 600 || 3 passengers enter the floor 2 and request to go to the
floor 3
Time: 600 || 4 passengers enter the floor 3 and request to go to the
floor 0
Time: 600 || 2 passengers enter the floor 4 and request to go to the
floor 3
Time: 600 || 6 passengers enter the floor 4 and request to go to the
floor 2
Time: 600 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 600 || Elevator 0 is heading to the floor 3 to pick up passengers
Time: 605 || Elevator 4 reaches to the floor 1 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 1 -- Destination
floor: 4 --
Time: 605 || Elevator 4 is heading to the floor 4 to unload passengers
Time: 605 || Elevator 3 reaches to the floor 2 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 3 -- Destination
floor: 3 --
Time: 605 || Elevator 3 is heading to the floor 3 to unload passengers
Time: 615 || Elevator 0 reaches to the floor 3 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 615 || Elevator 0 is heading to the floor 0 to unload passengers
Time: 620 || Elevator 2 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 5 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 2 -- Destination
floor: 4 --
Time: 620 || Elevator 2 is heading to the floor 2 to unload passengers
Time: 620 || Elevator 1 reaches to the floor 0 to unload passengers

```

-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 4
Time: 620 || Elevator 1 is heading to the floor 2 to pick up passengers
Time: 630 || Elevator 1 reaches to the floor 2 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 5 -- Destination
floor: 0 --
Time: 630 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 630 || Elevator 3 reaches to the floor 3 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 3 -- Number of
passengers: 3
Time: 630 || Elevator 3 is heading to the floor 4 to pick up passengers
Time: 635 || Elevator 3 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 2 -- Destination
floor: 3 --
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 6 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 635 || Elevator 3 is heading to the floor 3 to unload passengers
Time: 640 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 640 || Elevator 4 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 4 -- Number of
passengers: 1
Time: 640 || Elevator 4 is heading to the floor 4 to pick up passengers
Time: 640 || Elevator 4 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 640 || Elevator 4 is heading to the floor 0 to unload passengers
Time: 650 || Elevator 0 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of
passengers: 4
Time: 650 || Elevator 2 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 2 -- Number of
passengers: 5
Time: 650 || Elevator 2 is heading to the floor 4 to unload passengers
--
Time: 660 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 5
Time: 660 || Elevator 3 reaches to the floor 3 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 3 -- Number of
passengers: 2
Time: 660 || Elevator 3 is heading to the floor 2 to unload passengers
--
Time: 670 || Elevator 2 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 4 -- Number of
passengers: 2
Time: 675 || Elevator 3 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 2 -- Number of
passengers: 6
Time: 675 || Elevator 3 is heading to the floor 0 to unload passengers
--
Time: 680 || Elevator 1 is heading to the floor 4 to pick up passengers
Time: 680 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 680 || Elevator 4 reaches to the floor 0 to unload passengers

```

```
-- DROP OFF -- Elevator ID: 4 -- Current floor: 0 -- Number of
passengers: 4
Time: 695 || Elevator 3 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 0 -- Number of
passengers: 4
Time: 700 || Elevator 1 reaches to the floor 4 to pick up passengers
Time: 700 || Elevator 4 is heading to the floor 0 to pick up passengers
Time: 700 || Elevator 4 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 2 -- Destination
floor: 4 --
Time: 700 || Elevator 4 is heading to the floor 4 to unload passengers
Time: 700 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 700 || 6 passengers enter the floor 4 and request to go to the
floor 2
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 700 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 700 || Elevator 3 is heading to the floor 4 to pick up passengers
Time: 720 || Elevator 3 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 6 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 720 || Elevator 3 is heading to the floor 2 to unload passengers
Time: 720 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 740 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 4
Time: 740 || Elevator 4 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 4 -- Number of
passengers: 2
Time: 750 || Elevator 3 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 2 -- Number of
passengers: 6
Time: 750 || Elevator 3 is heading to the floor 0 to unload passengers
--
Time: 760 || Elevator 0 is heading to the floor 4 to pick up passengers
Time: 760 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 770 || Elevator 3 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 0 -- Number of
passengers: 4
Time: 780 || Elevator 0 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 780 || Elevator 0 is heading to the floor 0 to unload passengers
Time: 800 || Elevator 4 is heading to the floor 0 to pick up passengers
Time: 800 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 800 || Elevator 2 is heading to the floor 1 to pick up passengers
Time: 800 || 1 passengers enter the floor 1 and request to go to the
floor 4
Time: 800 || Elevator 3 is heading to the floor 2 to pick up passengers
Time: 800 || 5 passengers enter the floor 2 and request to go to the
floor 0
```

Time: 800 || 4 passengers enter the floor 3 and request to go to the floor 0
Time: 800 || Elevator 1 is heading to the floor 3 to pick up passengers
Time: 800 || 6 passengers enter the floor 4 and request to go to the floor 2
Time: 800 || 4 passengers enter the floor 4 and request to go to the floor 0
Time: 810 || Elevator 3 reaches to the floor 2 to pick up passengers
-- PICK UP -- Elevator ID: 3 -- Number of passengers: 5 -- Destination floor: 0 --
Time: 810 || Elevator 3 is heading to the floor 0 to unload passengers
Time: 815 || Elevator 2 reaches to the floor 1 to pick up passengers
-- PICK UP -- Elevator ID: 2 -- Number of passengers: 1 -- Destination floor: 4 --
Time: 815 || Elevator 2 is heading to the floor 4 to unload passengers
Time: 815 || Elevator 1 reaches to the floor 3 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination floor: 0 --
Time: 815 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 820 || Elevator 0 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of passengers: 4
Time: 820 || Elevator 0 is heading to the floor 4 to pick up passengers
Time: 820 || Elevator 4 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 2 -- Destination floor: 4 --
Time: 820 || Elevator 4 is heading to the floor 4 to unload passengers
Time: 840 || Elevator 3 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 3 -- Current floor: 0 -- Number of passengers: 5
Time: 840 || 4 passengers enter the floor 4 and request to go to the floor 0
Time: 840 || Elevator 0 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 6 -- Destination floor: 2 --
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination floor: 0 --
Time: 840 || Elevator 0 is heading to the floor 2 to unload passengers
Time: 850 || Elevator 2 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 2 -- Current floor: 4 -- Number of passengers: 1
Time: 850 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of passengers: 4
Time: 860 || Elevator 4 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 4 -- Number of passengers: 2
Time: 870 || Elevator 0 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 2 -- Number of passengers: 6
Time: 870 || Elevator 0 is heading to the floor 0 to unload passengers
--
Time: 880 || Elevator 1 is heading to the floor 4 to pick up passengers
Time: 880 || 4 passengers enter the floor 4 and request to go to the floor 0
Time: 890 || Elevator 0 reaches to the floor 0 to unload passengers


```

-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of
passengers: 4
Time: 900 || Elevator 4 is heading to the floor 0 to pick up passengers
Time: 900 || Elevator 1 reaches to the floor 4 to pick up passengers
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 900 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 900 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 900 || 5 passengers enter the floor 0 and request to go to the
floor 2
Time: 900 || Elevator 0 is heading to the floor 4 to pick up passengers
Time: 900 || 2 passengers enter the floor 4 and request to go to the
floor 3
Time: 900 || 6 passengers enter the floor 4 and request to go to the
floor 2
Time: 920 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 920 || Elevator 0 reaches to the floor 4 to pick up passengers
Time: 920 || Elevator 4 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 5 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 4 -- Number of passengers: 2 -- Destination
floor: 4 --
Time: 920 || Elevator 4 is heading to the floor 2 to unload passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 2 -- Destination
floor: 3 --
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 6 -- Destination
floor: 2 --
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 920 || Elevator 0 is heading to the floor 3 to unload passengers
Time: 940 || Elevator 1 reaches to the floor 0 to unload passengers
-- DROP OFF -- Elevator ID: 1 -- Current floor: 0 -- Number of
passengers: 4
Time: 945 || Elevator 0 reaches to the floor 3 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 3 -- Number of
passengers: 2
Time: 945 || Elevator 0 is heading to the floor 2 to unload passengers
--
Time: 950 || Elevator 4 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 2 -- Number of
passengers: 5
Time: 950 || Elevator 4 is heading to the floor 4 to unload passengers
--
Time: 960 || Elevator 0 reaches to the floor 2 to unload passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 2 -- Number of
passengers: 6
Time: 960 || Elevator 0 is heading to the floor 0 to unload passengers
--
Time: 960 || Elevator 1 is heading to the floor 4 to pick up passengers
Time: 960 || 4 passengers enter the floor 4 and request to go to the
floor 0
Time: 970 || Elevator 4 reaches to the floor 4 to unload passengers
-- DROP OFF -- Elevator ID: 4 -- Current floor: 4 -- Number of
passengers: 2
Time: 980 || Elevator 0 reaches to the floor 0 to unload passengers

```

```

Time: 980 || Elevator 1 reaches to the floor 4 to pick up passengers
-- DROP OFF -- Elevator ID: 0 -- Current floor: 0 -- Number of
passengers: 4
-- PICK UP -- Elevator ID: 1 -- Number of passengers: 4 -- Destination
floor: 0 --
Time: 980 || Elevator 1 is heading to the floor 0 to unload passengers
Time: 1000 || Elevator 0 is heading to the floor 0 to pick up
passengers
Time: 1000 || Elevator 0 reaches to the floor 0 to pick up passengers
-- PICK UP -- Elevator ID: 0 -- Number of passengers: 2 -- Destination
floor: 4 --
Time: 1000 || Elevator 0 is heading to the floor 4 to unload passengers
Time: 1000 || 2 passengers enter the floor 0 and request to go to the
floor 4
Time: 1000 || Elevator 4 is heading to the floor 1 to pick up
passengers
Time: 1000 || 3 passengers enter the floor 1 and request to go to the
floor 0
Time: 1000 || 1 passengers enter the floor 1 and request to go to the
floor 4
Time: 1000 || Elevator 3 is heading to the floor 2 to pick up
passengers
Time: 1000 || 5 passengers enter the floor 2 and request to go to the
floor 0
Time: 1000 || 2 passengers enter the floor 2 and request to go to the
floor 1
Time: 1000 || Elevator 2 is heading to the floor 3 to pick up
passengers
Time: 1000 || 4 passengers enter the floor 3 and request to go to the
floor 0
Time: 1000 || 6 passengers enter the floor 4 and request to go to the
floor 2
Time: 1000 || 4 passengers enter the floor 4 and request to go to the
floor 0

```

Simulation State:

---- State for each floor in the Building ----

```

-- For the floor 0 --
The total number of passengers requesting elevator access on the
floor 0 : 35
The total number of passengers that exited an elevator on the
floor0 : 127
The current number of passengers waiting for an elevator on the
floor 0 : 0
No elevator is currently heading towards the floor 0 for passenger
pickup

-- For the floor 1 --
The total number of passengers requesting elevator access on the
floor 1 : 11
The total number of passengers that exited an elevator on the
floor1 : 2
The current number of passengers waiting for an elevator on the
floor 1 : 4

```

Elevator 4 is currently heading towards the floor 1 for passenger pickup

-- For the floor 2 --

The total number of passengers requesting elevator access on the floor 2 : 32

The total number of passengers that exited an elevator on the floor 2 : 69

The current number of passengers waiting for an elevator on the floor 2 : 7

Elevator 3 is currently heading towards the floor 2 for passenger pickup

-- For the floor 3 --

The total number of passengers requesting elevator access on the floor 3 : 20

The total number of passengers that exited an elevator on the floor 3 : 9

The current number of passengers waiting for an elevator on the floor 3 : 4

Elevator 2 is currently heading towards the floor 3 for passenger pickup

-- For the floor 4 --

The total number of passengers requesting elevator access on the floor 4 : 166

The total number of passengers that exited an elevator on the floor 4 : 22

The current number of passengers waiting for an elevator on the floor 4 : 10

No elevator is currently heading towards the floor 4 for passenger pickup

---- State for each elevator ----

-- For the Elevator 0 --

The total number of passengers that entered the Elevator 0 throughout the simulation : 63

The total number of passengers that exited the Elevator 0 on the floor 0 : 32

The total number of passengers that exited the Elevator 0 on the floor 1 : 0

The total number of passengers that exited the Elevator 0 on the floor 2 : 23

The total number of passengers that exited the Elevator 0 on the floor 3 : 2

The total number of passengers that exited the Elevator 0 on the floor 4 : 4

The current number of passengers in the Elevator 0 : 2

-- For the Elevator 1 --

The total number of passengers that entered the Elevator 1 throughout the simulation : 53

The total number of passengers that exited the Elevator 1 on the floor 0 : 41

The total number of passengers that exited the Elevator 1 on the floor 1 : 0

```
The total number of passengers that exited the Elevator 1 on the
floor 2 : 6
The total number of passengers that exited the Elevator 1 on the
floor 3 : 0
The total number of passengers that exited the Elevator 1 on the
floor 4 : 2
The current number of passengers in the Elevator 1 : 4

-- For the Elevator 2 --
The total number of passengers that entered the Elevator 2
throughout the simulation : 25
The total number of passengers that exited the Elevator 2 on the
floor 0 : 8
The total number of passengers that exited the Elevator 2 on the
floor 1 : 0
The total number of passengers that exited the Elevator 2 on the
floor 2 : 11
The total number of passengers that exited the Elevator 2 on the
floor 3 : 0
The total number of passengers that exited the Elevator 2 on the
floor 4 : 6
The current number of passengers in the Elevator 2 : 0

-- For the Elevator 3 --
The total number of passengers that entered the Elevator 3
throughout the simulation : 46
The total number of passengers that exited the Elevator 3 on the
floor 0 : 26
The total number of passengers that exited the Elevator 3 on the
floor 1 : 2
The total number of passengers that exited the Elevator 3 on the
floor 2 : 12
The total number of passengers that exited the Elevator 3 on the
floor 3 : 5
The total number of passengers that exited the Elevator 3 on the
floor 4 : 1
The current number of passengers in the Elevator 3 : 0

-- For the Elevator 4 --
The total number of passengers that entered the Elevator 4
throughout the simulation : 48
The total number of passengers that exited the Elevator 4 on the
floor 0 : 20
The total number of passengers that exited the Elevator 4 on the
floor 1 : 0
The total number of passengers that exited the Elevator 4 on the
floor 2 : 17
The total number of passengers that exited the Elevator 4 on the
floor 3 : 2
The total number of passengers that exited the Elevator 4 on the
floor 4 : 9
The current number of passengers in the Elevator 4 : 0
```