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Lab 4 Write Up

The actual status of working and non-working in this assignment seemed really ambiguous to us, but here is some snippets of our console output. Thank you for your time.

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40  | SPAWNING |          @ floor_4 | 4 new passengers have requested to go to floor 0
80  | SPAWNING |          @ floor_4 | 4 new passengers have requested to go to floor 0
80  | PICKUP   | eID_1 @ floor_4 | picked up passengers, currently heading to floor 0
100 | SPAWNING |          @ floor_0 | 2 new passengers have requested to go to floor 4
100 | SPAWNING |          @ floor_4 | 6 new passengers have requested to go to floor 2
120 | SPAWNING |          @ floor_4 | 4 new passengers have requested to go to floor 0
120 | DROPOFF  | eID_1 @ floor_0 | dropped off 8 passengers
120 | PICKUP   | eID_3 @ floor_0 | picked up passengers, currently heading to floor 4
140 | PICKUP   | eID_0 @ floor_4 | picked up passengers, currently heading to floor 2
160 | DROPOFF  | eID_3 @ floor_4 | dropped off 2 passengers
160 | SPAWNING |          @ floor_4 | 4 new passengers have requested to go to floor 0
180 | DROPOFF  | eID_0 @ floor_0 | dropped off 4 passengers
200 | SPAWNING |          @ floor_0 | 2 new passengers have requested to go to floor 4
200 | SPAWNING |          @ floor_1 | 1 new passengers have requested to go to floor 4
200 | SPAWNING |          @ floor_2 | 5 new passengers have requested to go to floor 0
200 | SPAWNING |          @ floor_3 | 4 new passengers have requested to go to floor 0
200 | SPAWNING |          @ floor_4 | 6 new passengers have requested to go to floor 2
200 | SPAWNING |          @ floor_4 | 4 new passengers have requested to go to floor 0
200 | PICKUP   | eID_2 @ floor_4 | picked up passengers, currently heading to floor 2
220 | PICKUP   | eID_1 @ floor_0 | picked up passengers, currently heading to floor 4
230 | PICKUP   | eID_4 @ floor_2 | picked up passengers, currently heading to floor 0
235 | PICKUP   | eID_3 @ floor_1 | picked up passengers, currently heading to floor 4
240 | DROPOFF  | eID_2 @ floor_0 | dropped off 8 passengers
240 | SPAWNING |          @ floor_4 | 4 new passengers have requested to go to floor 0
260 | DROPOFF  | eID_4 @ floor_0 | dropped off 5 passengers
260 | DROPOFF  | eID_1 @ floor_4 | dropped off 2 passengers
270 | DROPOFF  | eID_3 @ floor_4 | dropped off 1 passengers
280 | SPAWNING |          @ floor_4 | 4 new passengers have requested to go to floor 0
280 | PICKUP   | eID_1 @ floor_4 | picked up passengers, currently heading to floor 0
295 | PICKUP   | eID_4 @ floor_3 | picked up passengers, currently heading to floor 0
300 | SPAWNING |          @ floor_0 | 2 new passengers have requested to go to floor 4
300 | SPAWNING |          @ floor_0 | 5 new passengers have requested to go to floor 2
300 | SPAWNING |          @ floor_4 | 2 new passengers have requested to go to floor 3
300 | SPAWNING |          @ floor_4 | 6 new passengers have requested to go to floor 2
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320 | SPAWNING |            @ floor_4 | 4 new passengers have requested to go to floor 0
320 | DROPOFF  | eID_1 @ floor_0 | dropped off 8 passengers
330 | DROPOFF  | eID_4 @ floor_0 | dropped off 4 passengers
340 | PICKUP   | eID_3 @ floor_0 | picked up passengers, currently heading to floor 4
360 | SPAWNING |            @ floor_4 | 4 new passengers have requested to go to floor 0
360 | PICKUP   | eID_1 @ floor_4 | picked up passengers, currently heading to floor 3
370 | DROPOFF  | eID_3 @ floor_2 | dropped off 5 passengers
380 | DROPOFF  | eID_3 @ floor_4 | dropped off 2 passengers
400 | SPAWNING |            @ floor_0 | 2 new passengers have requested to go to floor 4
400 | DROPOFF  | eID_1 @ floor_0 | dropped off 8 passengers
400 | SPAWNING |            @ floor_1 | 1 new passengers have requested to go to floor 4
400 | SPAWNING |            @ floor_2 | 5 new passengers have requested to go to floor 0
400 | SPAWNING |            @ floor_3 | 4 new passengers have requested to go to floor 0
400 | SPAWNING |            @ floor_4 | 6 new passengers have requested to go to floor 2
400 | SPAWNING |            @ floor_4 | 4 new passengers have requested to go to floor 0
425 | PICKUP   | eID_4 @ floor_1 | picked up passengers, currently heading to floor 4
440 | SPAWNING |            @ floor_4 | 4 new passengers have requested to go to floor 0
440 | PICKUP   | eID_3 @ floor_0 | picked up passengers, currently heading to floor 4
460 | DROPOFF  | eID_4 @ floor_4 | dropped off 1 passengers
480 | DROPOFF  | eID_3 @ floor_4 | dropped off 2 passengers
480 | SPAWNING |            @ floor_4 | 4 new passengers have requested to go to floor 0
490 | PICKUP   | eID_4 @ floor_2 | picked up passengers, currently heading to floor 0
500 | SPAWNING |            @ floor_0 | 2 new passengers have requested to go to floor 4
500 | SPAWNING |            @ floor_1 | 3 new passengers have requested to go to floor 0
500 | SPAWNING |            @ floor_2 | 2 new passengers have requested to go to floor 1
500 | SPAWNING |            @ floor_4 | 6 new passengers have requested to go to floor 2
505 | PICKUP   | eID_3 @ floor_3 | picked up passengers, currently heading to floor 0
520 | DROPOFF  | eID_4 @ floor_0 | dropped off 5 passengers
520 | SPAWNING |            @ floor_4 | 4 new passengers have requested to go to floor 0
540 | PICKUP   | eID_4 @ floor_0 | picked up passengers, currently heading to floor 4
540 | DROPOFF  | eID_3 @ floor_0 | dropped off 4 passengers
560 | SPAWNING |            @ floor_4 | 4 new passengers have requested to go to floor 0
565 | PICKUP   | eID_3 @ floor_1 | picked up passengers, currently heading to floor 0
```

Here are the final prints:

```
This elevator simulation ran for 1000 simulated seconds where each simulated second is equal to 100 real time miliseconds.

---------------------------------------- FLOOR STATES ----------------------------------------
Floor 0 | Total number of passengers requesting access: 35
        | Total number of passengers that exited an elevator on this floor: 7
        | Current number of passengers waiting for an elevator on the floor: 20
        | Elevator number currently heading towards this floor: -1
------------------------------------------------------------------------------------------
Floor 1 | Total number of passengers requesting access: 11
        | Total number of passengers that exited an elevator on this floor: 4
        | Current number of passengers waiting for an elevator on the floor: 6
        | Elevator number currently heading towards this floor: -1
------------------------------------------------------------------------------------------
Floor 2 | Total number of passengers requesting access: 32
        | Total number of passengers that exited an elevator on this floor: 10
        | Current number of passengers waiting for an elevator on the floor: 19
        | Elevator number currently heading towards this floor: -1
------------------------------------------------------------------------------------------
Floor 3 | Total number of passengers requesting access: 20
        | Total number of passengers that exited an elevator on this floor: 4
        | Current number of passengers waiting for an elevator on the floor: 12
        | Elevator number currently heading towards this floor: -1
------------------------------------------------------------------------------------------
Floor 4 | Total number of passengers requesting access: 166
        | Total number of passengers that exited an elevator on this floor: 12
        | Current number of passengers waiting for an elevator on the floor: 66
        | Elevator number currently heading towards this floor: -1
------------------------------------------------------------------------------------------
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---------------------------------------- ELEVATOR STATES ----------------------------------------
Elevator 0      | Total number of passengers that entered the elevator: 10
                | Total number of passengers that exited the elevator: 4
                | Current number of passengers heading to any floor: 6
-------------------------------------------------------------------------------------------------
Elevator 1      | Total number of passengers that entered the elevator: 34
                | Total number of passengers that exited the elevator: 26
                | Current number of passengers heading to any floor: 8
-------------------------------------------------------------------------------------------------
Elevator 2      | Total number of passengers that entered the elevator: 14
                | Total number of passengers that exited the elevator: 8
                | Current number of passengers heading to any floor: 6
-------------------------------------------------------------------------------------------------
Elevator 3      | Total number of passengers that entered the elevator: 63
                | Total number of passengers that exited the elevator: 43
                | Current number of passengers heading to any floor: 20
-------------------------------------------------------------------------------------------------
Elevator 4      | Total number of passengers that entered the elevator: 20
                | Total number of passengers that exited the elevator: 22
                | Current number of passengers heading to any floor: -2
-------------------------------------------------------------------------------------------------
```