

CSE344 HW3 Report

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1 Design Structure of Thread Behaviors

The system programming assignment simulates a scenario where car owners arrive at a parking lot to either park or pick up their cars. The system involves three main entities: car owners, a car owner producer, and a car attendant. Each entity is represented by a separate thread in the system.

1.1 Thread Behaviors

1. **Car Owner:** This thread represents a car owner who arrives at the parking lot. The behavior of the car owner thread includes:
 - Arrival at the parking lot.
 - Selection of car type (pickup or automobile).
 - Enqueueing in the temporary parking lot queue if there is space available.
 - Waiting for the car attendant to handle the parking or retrieval of their car.
 - Departure from the parking lot after picking up the car.
2. **Car Owner Producer:** This thread continuously produces car owners and assigns them unique IDs. The behavior of the car owner producer thread includes:
 - Continuously generating car owners with unique IDs.
 - Creating and detaching threads for each car owner.
3. **Car Attendant:** This thread represents the car attendant responsible for managing the parking and retrieval of cars. The behavior of the car attendant thread includes:
 - Periodically checking if there are car owners waiting to pick up their cars.
 - If a car owner is present, retrieving the car and handing it over to the owner.
 - Checking if there are cars in the temporary parking lot waiting to be parked.
 - Parking the cars in the main parking lot if space is available.

2 Implementation Details

2.1 Macro Constants

- **MAX_PICKUP:** Maximum number of pickup spots in the parking lot.
- **MAX_AUTOMOBILE:** Maximum number of automobile spots in the parking lot.
- **MAX_QUEUE:** Maximum number of cars allowed in the temporary parking lot queue.

2.2 Enumeration Types

- **CarType:** Represents the types of cars (Pickup or Automobile).
- **ParkSuccess:** Represents the success status of a park operation (Success or Fail).

2.3 Global Variables

- **pickup_empty_spots, pickup_full_spots:** Semaphores representing the availability of pickup spots in the parking lot.
- **auto_empty_spots, auto_full_spots:** Semaphores representing the availability of automobile spots in the parking lot.
- **car_in_queue_mutex, car_out_queue_mutex:** Mutex semaphores for managing access to the temporary parking lot queue and the queue for cars ready to be picked up.
- **car_in_queue, car_out_queue:** Pointers to the head of linked lists representing the temporary parking lot queue and the queue for cars ready to be picked up.
- **parked_pickup, parked_automobile:** Counters for the number of pickup and automobile cars parked in the main parking lot.

2.4 Data Structures

2.4.1 Queue

In this system programming assignment, the queue data structure plays a crucial role in managing the flow of cars entering and exiting the parking lot. The queue is utilized to handle the temporary storage of cars waiting to be parked or picked up. Here's a detailed explanation of its usage and importance in the project:

- **Temporary Parking Lot Queue:**
One of the primary functionalities of the queue is to serve as a temporary storage mechanism for cars awaiting parking in the parking lot. When a car owner arrives at the parking lot, the system checks if there is space available in the temporary parking lot queue. If there is space, the car is enqueued in this queue, indicating that it is ready to be parked. This ensures that cars are processed in the order they arrive, maintaining fairness and preventing congestion at the parking lot entrance.
- **Queue Management:**
The queue is dynamically managed throughout the execution of the program. New nodes representing cars are enqueued at the end of the linked list structure, ensuring that the first car to arrive is the first to be processed. Additionally, the dequeue operation is used to remove and retrieve the first node from the linked list when a car is ready to be parked or picked up. This efficient management of the queue allows for smooth coordination between car owners and the car attendant, minimizing wait times and maximizing throughput.
- **Synchronization and Communication:**
Semaphores are utilized in conjunction with the queue to ensure proper synchronization and communication between threads. Each node in the queue is associated with a semaphore, allowing threads to wait for specific events (e.g., car parking completion) before proceeding. This synchronization mechanism prevents race conditions and ensures that threads operate in a coordinated manner, maintaining the integrity of the queue data structure.
- **Dynamic Size Management:**
The queue data structure is designed to accommodate a dynamic number of cars based on the available space in the parking lot. The maximum size of the queue is defined by the macro constant `MAX_QUEUE`, ensuring that the system can handle varying levels of demand without exceeding its capacity. This flexibility allows the parking lot to efficiently manage fluctuations in car arrivals and departures, optimizing resource utilization and minimizing idle time.

Overall, the queue data structure serves as a fundamental component of the parking lot management system, facilitating the orderly processing of cars and ensuring efficient utilization of parking resources. Its effective utilization enables seamless coordination between car owners and the car attendant, resulting in a streamlined and responsive parking experience.

2.5 Functions

2.5.1 Car Owner

The `car_owner` function represents a thread that simulates the behavior of a car owner in the parking lot scenario. It serves as the entry point for a thread that handles the actions of a car owner, including parking and picking up their car. Below is a detailed explanation of each component of the `car_owner` function:

- **Owner ID Retrieval:**
The function begins by retrieving the owner ID from the void pointer argument passed to the thread. This ID uniquely identifies the car owner within the simulation.
- **Arrival Message:**
Upon arrival at the parking lot, a message is printed indicating the presence of the car owner with the corresponding owner ID.
- **Random Car Selection:**
A random selection is made to determine the type of car (either Pickup or Automobile) that the owner will either park or pick up. This randomness adds variability to the simulation.
- **Temporary Parking Lot Queue Handling:**
The function acquires the mutex semaphore to safely access the temporary parking lot queue. It then calculates the number of cars currently in the queue.
- **Enqueueing in the Queue:**
If there is space available in the temporary parking lot queue, the car owner's car is enqueued. A message is printed to indicate the owner's presence in the queue, along with the current count of cars in the queue.
- **Handling Full Queue:**
If the temporary parking lot queue is full, the car owner leaves the parking lot, and the function exits.
- **Parking Time:**
After successfully enqueueing in the temporary parking lot queue, the car owner waits for a specified duration (determined by the macro constant `CAR_OWNER_SLEEP`). This wait simulates the time taken by the car resting in the park.
- **Queue for Car Pickup:**
Upon returning to pick up the car, the car owner enqueues the car in the queue for cars ready to be picked up.
- **Transaction Wait and Freeing Resources:**
The function waits for the transaction semaphore associated with the queued car, ensuring synchronization between threads. Once the transaction is complete, the memory allocated for the queued car node is freed.

The `car_owner` function orchestrates the behavior of a car owner thread, including arrival, parking, and car pickup, while ensuring proper synchronization and resource management within the parking lot simulation.

2.5.2 Car Owner Producer

The `car_owner_producer` function is responsible for the continuous production of car owners within the parking lot simulation. This function serves as a thread entry point and operates independently to generate new instances of car owner threads. Below is a comprehensive explanation of the behavior and significance of the `car_owner_producer` function:

- **Continuous Car Owner Generation:**

The `car_owner_producer` function implements a loop to continuously produce car owners throughout the execution of the program. This loop ensures a constant influx of car owners into the parking lot, simulating real-world scenarios where vehicles arrive at irregular intervals.

- **Thread Creation:**

Within each iteration of the loop, a new car owner thread is created using the `pthread_create` function. This thread creation mechanism allows for concurrent execution of multiple car owner threads, enabling parallel processing of parking lot operations.

- **Owner ID Assignment:**

Each newly created car owner thread is assigned a unique owner ID to differentiate between individual car owners within the simulation. The owner ID is incremented with each iteration of the loop, ensuring that each car owner is sequentially numbered starting from 0.

- **Detached Thread Execution:**

Upon creation of a new car owner thread, the `pthread_detach` function is invoked to detach the thread from the parent thread. This detachment allows the newly created thread to operate independently without requiring explicit joining by the parent thread. As a result, the parent thread can continue its execution without being blocked by the child threads.

- **Thread Sleep Interval:**

To control the rate of car owner generation and regulate the flow of vehicles into the parking lot, the `car_owner_producer` function incorporates a sleep interval specified by the macro constant `CAR_OWNER_PRODUCER_SLEEP`. This interval determines the duration of time between consecutive iterations of the loop, effectively controlling the rate of car arrivals.

The `car_owner_producer` function plays a critical role in the parking lot simulation by orchestrating the continuous generation of car owners, ensuring a steady influx of vehicles into the parking lot. Its ability to create and manage car owner threads dynamically contributes to the realism and complexity of the simulation, enabling the simulation of various parking scenarios and traffic conditions.

2.5.3 Car Attendant

The `car_attendant` function serves as the core component responsible for managing the parking lot operations and handling car owner interactions. This function orchestrates the tasks performed by the car attendant within the parking lot simulation. Below is a comprehensive breakdown of the behavior and significance of the `car_attendant` function:

- **Continuous Operation:**

The `car_attendant` function operates within a loop, continually executing parking lot management tasks as long as there are active car owner threads in the system. This loop ensures that the car attendant remains responsive to incoming car owners and efficiently handles parking and pickup operations.

- **Task Scheduling:**

Within each iteration of the loop, the car attendant performs a series of sequential tasks, including checking for car owners waiting to pick up their cars and managing cars in the temporary parking lot. These tasks are executed in a predetermined order to ensure proper coordination and efficient utilization of parking resources.

- **Car Pickup Handling:**

Upon detecting a car owner waiting to pick up their car, the car attendant dequeues the car from the `car_out_queue` and initiates the pickup process. The attendant first verifies the location of the car owner and moves to the appropriate parking lot if necessary, using the `attendant_moves` function. Once at the correct location, the attendant facilitates the pickup process by bringing the car to the owner and updating the parking lot status accordingly.

- **Temporary Parking Lot Management:**

If there are cars waiting in the temporary parking lot (`car_in_queue`), the car attendant dequeues the cars and moves them to the main parking lot. Similar to the pickup process, the attendant adjusts their location using the `attendant_moves` function and transfers the cars to the designated parking spots. This ensures that cars are efficiently parked and retrieved based on their arrival order and availability of parking spots.

- **Dynamic Parking Lot Status Update:**

Throughout the execution of the function, the car attendant continuously updates the parking lot status by adjusting the counts of parked pickup trucks and automobiles. This dynamic status update reflects the current occupancy levels of the parking lot and enables the attendant to make informed decisions regarding parking allocation and resource management.

- **Thread Synchronization:**

The car attendant function utilizes semaphores (`car_out_queue_mutex` and `car_in_queue_mutex`) to synchronize access to shared resources and prevent race conditions between threads. These semaphores ensure that critical sections of the code are executed atomically, preserving the integrity of the parking lot data structures and avoiding concurrency issues.

The `car_attendant` function serves as the linchpin of the parking lot simulation, orchestrating the orderly flow of cars and managing parking lot operations in a dynamic and efficient manner. Its ability to handle various scenarios, such as car pickups and temporary parking lot management, contributes to the realism and complexity of the simulation, providing a rich and immersive experience for the users.

2.5.4 Main

The `main` function serves as the entry point for the parking lot simulation program, orchestrating the initialization, execution, and termination of the simulation. Below is a comprehensive breakdown of the behavior and significance of the `main` function:

- **Command-Line Argument Parsing:**

The `main` function first parses the command-line arguments to determine the number of car owners participating in the simulation. It expects either no arguments, in which case a default value of 100 car owners is used, or a single positive integer argument specifying the desired number of car owners. The function validates the provided arguments and displays appropriate error messages if the input is invalid or exceeds the expected format.

- **Initialization of Random Seed:**

After parsing the command-line arguments, the `main` function initializes the random number generator seed using the current system time (`time(NULL)`). This step ensures that the simulation generates pseudo-random numbers unique to each execution, contributing to the variability and unpredictability of the simulation outcomes.

- **Semaphore Initialization:**

The function initializes multiple semaphores used for synchronization and mutual exclusion within the simulation. These semaphores control access to shared resources such as parking spots and queue structures, preventing race conditions and ensuring thread safety during concurrent execution. Specifically, semaphores are initialized for both pickup and automobile parking spots (`pickup_empty_spots`, `pickup_full_spots`, `auto_empty_spots`, `auto_full_spots`), as well as for the queue structures representing cars waiting for parking and pickup (`car_in_queue_mutex`, `car_out_queue_mutex`).

- **Thread Creation and Execution:**

Following semaphore initialization, the `main` function creates and starts two threads responsible for simulating car owner behavior (`car_owner_producer`) and car attendant operations (`car_attendant`). These threads execute concurrently, simulating the dynamic interactions between car owners and the parking lot attendant within the simulation environment.

- **Thread Joining and Termination:**

After creating the threads, the `main` function waits for both threads to complete their execution using the `pthread_join` function. This ensures that the main thread waits for the simulation to finish before terminating the program. Once all threads have completed execution, the function prints a completion message indicating the end of the simulation.

- **Return Status:**

Finally, the `main` function returns 0 to indicate successful execution of the program. A return value of 0 conventionally signifies that the program terminated without encountering any errors, providing feedback to the calling environment about the outcome of the simulation.

The `main` function serves as the central control mechanism for the parking lot simulation, coordinating the initialization, execution, and termination of the simulation process. Its role in managing command-line arguments, initializing resources, creating threads, and handling program termination ensures the smooth execution of the simulation, providing users with an immersive and realistic parking lot experience.

2.6 Semaphores & Synchronization/Race Conditions Handling

To handle synchronization and prevent race conditions in the provided code, several semaphores are utilized:

2.6.1 `car_in_queue_mutex` and `car_out_queue_mutex`

These semaphores are used to synchronize access to the `car_in_queue` and `car_out_queue` data structures, respectively. Both the `car_owner` thread function and the `car_attendant` thread function need to access these queues to enqueue and dequeue cars, respectively. By utilizing these semaphores, access to the queues is controlled, preventing race conditions where multiple threads might attempt to modify the queues simultaneously.

2.6.2 `pickup_empty_spots` and `auto_empty_spots`

These semaphores keep track of the number of available parking spots for pickups and automobiles, respectively. Before the car attendant parks a car, it ensures that there is an available spot in the corresponding parking lot. These semaphores guarantee that only a limited number of cars can be parked simultaneously, preventing overcrowding and ensuring fair access to parking spots.

2.6.3 `pickup_full_spots` and `auto_full_spots`

These semaphores signal when a parking lot for pickups or automobiles is full. When a parking lot reaches its maximum capacity, the car attendant waits until a spot becomes available before parking another car. These semaphores control access to the parking lots, preventing the attendant from attempting to park more cars than there are available spots.

2.6.4 Transaction Semaphore in the Node Structure

Each node in the queue data structure contains a semaphore called `transaction`. This semaphore synchronizes communication between the car owner thread and the car attendant thread. When a car owner arrives to pick up their car, the car attendant dequeues the car and signals the `transaction` semaphore, allowing the owner thread to proceed. Similarly, when the car attendant parks a car, it signals the `transaction` semaphore to notify the owner thread that the car has been parked successfully.

Collectively, these semaphores ensure proper synchronization and prevent race conditions in the multi-threaded environment of the parking simulation program. They control access to shared resources such as queues and parking spots, ensuring that operations are performed in a coordinated and orderly manner.

3 Tests

3.1 Usage

If no argument is given to the simulation then the number of car owners is set to the default value of 100.

One can set the desired number of car owners by `./main [num_of_car_owners]` as it is prompted whenever an incorrect number of arguments or incorrect type of argument is passed to the simulation.

3.2.1 Three Owners

[illegible]

Figure 1: Example with only three car owners

3.2.2 Hundred Owners

As the output of the simulation is quite lengthy this part is given as text and not an image.

Car owner 0 arrived.
Car owner 0 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
Car attendant is checking if any car owner is here to pick up their car.
No car owner is here to pick up their car.
Car attendant is checking if any car is in temporary parking lot.
Car attendant validated there is a car in temporary parking lot.
Car attendant is moving to the temporary parking lot.
Car owner 1 arrived.
Car owner 1 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
Car attendant is bringing the pickup of the owner 0 to the parking lot.
Car attendant is moving to the parking lot.
Car owner 2 arrived.
Car owner 2 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car attendant parked the pickup car.
Parking lot status: Pickup: 1/4, Automobile: 0/8
Car owner 3 arrived.
Car owner 3 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car attendant is checking if any car owner is here to pick up their car.
No car owner is here to pick up their car.
Car attendant is checking if any car is in temporary parking lot.
Car attendant validated there is a car in temporary parking lot.
Car attendant is moving to the temporary parking lot.
Car owner 4 arrived.
Car owner 4 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
Car attendant is bringing the automobile of the owner 1 to the parking lot.
Car attendant is moving to the parking lot.
Car owner 5 arrived.
Car owner 5 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car attendant parked the automobile.
Parking lot status: Pickup: 1/4, Automobile: 1/8
Car owner 6 arrived.
Car owner 6 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car attendant is checking if any car owner is here to pick up their car.
No car owner is here to pick up their car.
Car attendant is checking if any car is in temporary parking lot.
Car attendant validated there is a car in temporary parking lot.
Car attendant is moving to the temporary parking lot.
Car owner 7 arrived.
Car owner 7 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
Car attendant is bringing the automobile of the owner 4 to the parking lot.
Car attendant is moving to the parking lot.
Car owner 8 arrived.
Car owner 8 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car attendant parked the automobile.
Parking lot status: Pickup: 1/4, Automobile: 2/8
Car owner 9 arrived.
Car owner 9 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car attendant is checking if any car owner is here to pick up their car.
No car owner is here to pick up their car.
Car attendant is checking if any car is in temporary parking lot.
Car attendant validated there is a car in temporary parking lot.

Car attendant is moving to the temporary parking lot.
 Car owner 10 arrived.
 Car owner 10 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant is bringing the pickup of the owner 7 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 11 arrived.
 Car owner 11 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 12 arrived.
 Car owner 12 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 0 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 0 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 13 arrived.
 Car owner 13 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 0 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 10 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 14 arrived.
 Car owner 14 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 15 arrived.
 Car owner 15 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 1 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 1 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 16 arrived.
 Car owner 16 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 1 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 14 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 17 arrived.
 Car owner 17 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 18 arrived.
 Car owner 18 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 4 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 4 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.

Car attendant is moving to the temporary parking lot.
 Car owner 19 arrived.
 Car owner 19 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 4 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 17 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 20 arrived.
 Car owner 20 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 21 arrived.
 Car owner 21 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 7 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 7 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 22 arrived.
 Car owner 22 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 7 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 20 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 23 arrived.
 Car owner 23 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 24 arrived.
 Car owner 24 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 10 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 10 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 25 arrived.
 Car owner 25 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 10 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 23 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 26 arrived.
 Car owner 26 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 1/4, Automobile: 3/8
 Car owner 27 arrived.
 Car owner 27 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 14 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.

Car attendant validated there is a car owner here to pick up their car.
 Owner 14 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 28 arrived.
 Car owner 28 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 14 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 26 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 29 arrived.
 Car owner 29 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 30 arrived.
 Car owner 30 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 17 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 17 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 31 arrived.
 Car owner 31 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 17 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 29 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 32 arrived.
 Car owner 32 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 33 arrived.
 Car owner 33 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 20 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 20 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 34 arrived.
 Car owner 34 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 20 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 32 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 35 arrived.
 Car owner 35 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 36 arrived.

Car owner 36 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 23 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 23 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 37 arrived.
 Car owner 37 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 23 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 35 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 38 arrived.
 Car owner 38 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 39 arrived.
 Car owner 39 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 26 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 26 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 40 arrived.
 Car owner 40 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 26 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 38 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 41 arrived.
 Car owner 41 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 1/4, Automobile: 3/8
 Car owner 42 arrived.
 Car owner 42 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 29 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 29 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 43 arrived.
 Car owner 43 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 29 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 41 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 44 arrived.
 Car owner 44 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1

Car attendant parked the pickup car.
 Parking lot status: Pickup: 1/4, Automobile: 3/8
 Car owner 45 arrived.
 Car owner 45 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 32 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 32 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 46 arrived.
 Car owner 46 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 32 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 44 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 47 arrived.
 Car owner 47 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 1/4, Automobile: 3/8
 Car owner 48 arrived.
 Car owner 48 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 35 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 35 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 49 arrived.
 Car owner 49 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 35 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 47 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 50 arrived.
 Car owner 50 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 51 arrived.
 Car owner 51 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 38 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 38 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 52 arrived.
 Car owner 52 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 38 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 50 to the parking lot.

Car attendant is moving to the parking lot.
Car owner 53 arrived.
Car owner 53 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
Car attendant parked the pickup car.
Parking lot status: Pickup: 3/4, Automobile: 1/8
Car owner 54 arrived.
Car owner 54 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car owner 41 returned to pick up their car.
Car attendant is checking if any car owner is here to pick up their car.
Car attendant validated there is a car owner here to pick up their car.
Owner 41 is here to pick up their pickup.
Car attendant is bringing the car to the owner.
Car attendant is moving to the temporary parking lot.
Car owner 55 arrived.
Car owner 55 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Owner 41 picked up their pickup car.
Car attendant is checking if any car is in temporary parking lot.
Car attendant validated there is a car in temporary parking lot.
Car attendant is bringing the pickup of the owner 53 to the parking lot.
Car attendant is moving to the parking lot.
Car owner 56 arrived.
Car owner 56 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
Car attendant parked the pickup car.
Parking lot status: Pickup: 3/4, Automobile: 1/8
Car owner 57 arrived.
Car owner 57 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car owner 44 returned to pick up their car.
Car attendant is checking if any car owner is here to pick up their car.
Car attendant validated there is a car owner here to pick up their car.
Owner 44 is here to pick up their automobile.
Car attendant is bringing the car to the owner.
Car attendant is moving to the temporary parking lot.
Car owner 58 arrived.
Car owner 58 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Owner 44 picked up their automobile.
Car attendant is checking if any car is in temporary parking lot.
Car attendant validated there is a car in temporary parking lot.
Car attendant is bringing the pickup of the owner 56 to the parking lot.
Car attendant is moving to the parking lot.
Car owner 59 arrived.
Car owner 59 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
Car attendant parked the pickup car.
Parking lot status: Pickup: 4/4, Automobile: 0/8
Car owner 60 arrived.
Car owner 60 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Car owner 47 returned to pick up their car.
Car attendant is checking if any car owner is here to pick up their car.
Car attendant validated there is a car owner here to pick up their car.
Owner 47 is here to pick up their pickup.
Car attendant is bringing the car to the owner.
Car attendant is moving to the temporary parking lot.
Car owner 61 arrived.
Car owner 61 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
Owner 47 picked up their pickup car.

Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 59 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 62 arrived.
 Car owner 62 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 4/4, Automobile: 0/8
 Car owner 63 arrived.
 Car owner 63 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 50 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 50 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 64 arrived.
 Car owner 64 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 50 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 62 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 65 arrived.
 Car owner 65 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 66 arrived.
 Car owner 66 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 53 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 53 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 67 arrived.
 Car owner 67 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 53 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 65 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 68 arrived.
 Car owner 68 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 69 arrived.
 Car owner 69 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 56 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 56 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.

Car owner 70 arrived.
 Car owner 70 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 56 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 68 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 71 arrived.
 Car owner 71 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 72 arrived.
 Car owner 72 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 59 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 59 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 73 arrived.
 Car owner 73 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 59 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 71 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 74 arrived.
 Car owner 74 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 75 arrived.
 Car owner 75 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 62 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 62 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 76 arrived.
 Car owner 76 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 62 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 74 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 77 arrived.
 Car owner 77 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 78 arrived.
 Car owner 78 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 65 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.

Owner 65 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 79 arrived.
 Car owner 79 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 65 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 77 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 80 arrived.
 Car owner 80 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 4/4, Automobile: 0/8
 Car owner 81 arrived.
 Car owner 81 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 68 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 68 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 82 arrived.
 Car owner 82 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 68 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 80 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 83 arrived.
 Car owner 83 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 84 arrived.
 Car owner 84 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 71 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 71 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 85 arrived.
 Car owner 85 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 71 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 83 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 86 arrived.
 Car owner 86 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 87 arrived.
 Car owner 87 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1

Car owner 74 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 74 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 88 arrived.
 Car owner 88 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 74 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 86 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 89 arrived.
 Car owner 89 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 90 arrived.
 Car owner 90 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 77 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 77 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 91 arrived.
 Car owner 91 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 77 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 89 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 92 arrived.
 Car owner 92 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 93 arrived.
 Car owner 93 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 80 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 80 is here to pick up their automobile.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 94 arrived.
 Car owner 94 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 80 picked up their automobile.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 92 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 95 arrived.
 Car owner 95 is waiting in their automobile in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.

Parking lot status: Pickup: 3/4, Automobile: 1/8
 Car owner 96 arrived.
 Car owner 96 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 83 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 83 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Car owner 97 arrived.
 Car owner 97 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Owner 83 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the automobile of the owner 95 to the parking lot.
 Car attendant is moving to the parking lot.
 Car owner 98 arrived.
 Car owner 98 is waiting in their pickup in temporary parking lot. Cars in temporary park: 1/1
 Car attendant parked the automobile.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 99 arrived.
 Car owner 99 arrived but left because the temporary parking lot is full. Cars in temporary park: 1/1
 Car owner 86 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 86 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Owner 86 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 Car attendant validated there is a car in temporary parking lot.
 Car attendant is bringing the pickup of the owner 98 to the parking lot.
 Car attendant is moving to the parking lot.
 Car attendant parked the pickup car.
 Parking lot status: Pickup: 2/4, Automobile: 2/8
 Car owner 89 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Owner 89 is here to pick up their pickup.
 Car attendant is bringing the car to the owner.
 Car attendant is moving to the temporary parking lot.
 Owner 89 picked up their pickup car.
 Car attendant is checking if any car is in temporary parking lot.
 No car is in temporary parking lot.
 Parking lot status: Pickup: 1/4, Automobile: 2/8
 Car attendant is checking if any car owner is here to pick up their car.
 No car owner is here to pick up their car.
 Car attendant is checking if any car is in temporary parking lot.
 No car is in temporary parking lot.
 Parking lot status: Pickup: 1/4, Automobile: 2/8
 Car owner 92 returned to pick up their car.
 Car attendant is checking if any car owner is here to pick up their car.
 Car attendant validated there is a car owner here to pick up their car.
 Car attendant is moving to the parking lot.

Owner 92 is here to pick up their automobile.
Car attendant is bringing the car to the owner.
Car attendant is moving to the temporary parking lot.
Owner 92 picked up their automobile.
Car attendant is checking if any car is in temporary parking lot.
No car is in temporary parking lot.
Parking lot status: Pickup: 1/4, Automobile: 1/8
Car owner 95 returned to pick up their car.
Car attendant is checking if any car owner is here to pick up their car.
Car attendant validated there is a car owner here to pick up their car.
Car attendant is moving to the parking lot.
Owner 95 is here to pick up their automobile.
Car attendant is bringing the car to the owner.
Car attendant is moving to the temporary parking lot.
Owner 95 picked up their automobile.
Car attendant is checking if any car is in temporary parking lot.
No car is in temporary parking lot.
Parking lot status: Pickup: 1/4, Automobile: 0/8
Car owner 98 returned to pick up their car.
Car attendant is checking if any car owner is here to pick up their car.
Car attendant validated there is a car owner here to pick up their car.
Car attendant is moving to the parking lot.
Owner 98 is here to pick up their pickup.
Car attendant is bringing the car to the owner.
Car attendant is moving to the temporary parking lot.
Owner 98 picked up their pickup car.
Car attendant is checking if any car is in temporary parking lot.
No car is in temporary parking lot.
Parking lot status: Pickup: 0/4, Automobile: 0/8
Car attendant is checking if any car owner is here to pick up their car.
No car owner is here to pick up their car.
Car attendant is checking if any car is in temporary parking lot.
No car is in temporary parking lot.
Parking lot status: Pickup: 0/4, Automobile: 0/8

Simulation completed.