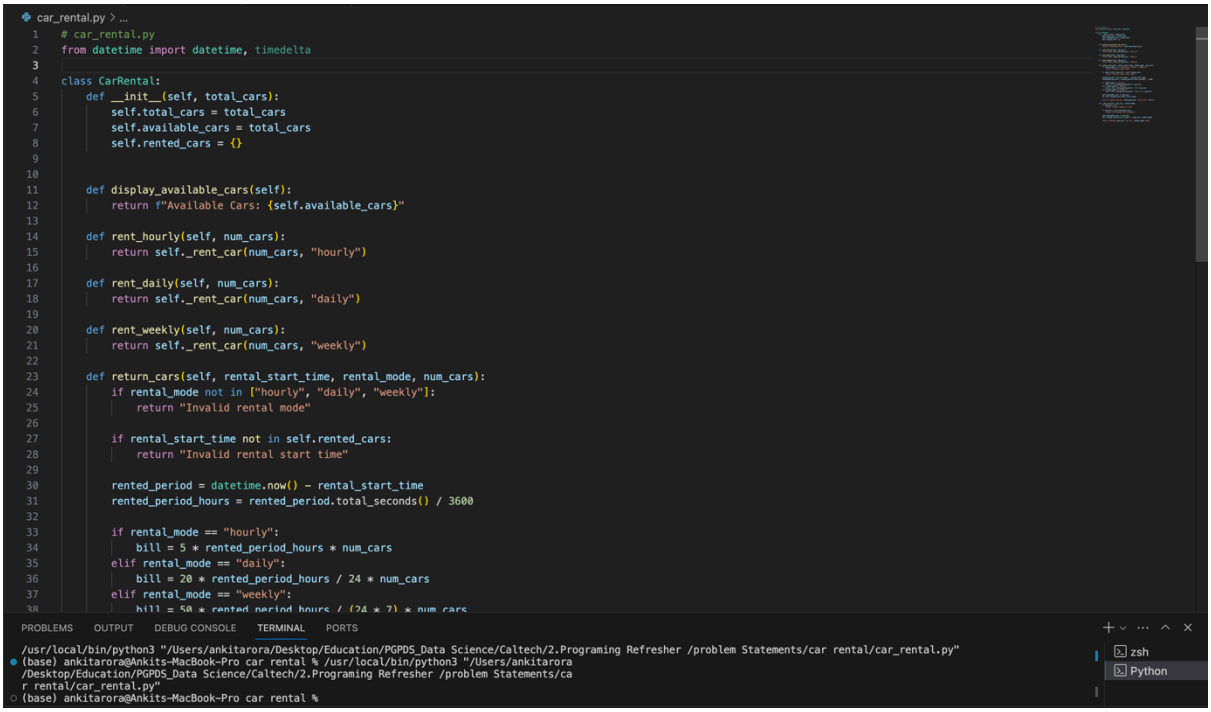
car_rental.py > ...
# car_rental.py
from datetime import datetime, timedelta
class CarRental:
def __init__(self, total_cars):
self.total_cars = total_cars
self.available_cars = total_cars
self.rented_cars = {}
def display_available_cars(self):
return f"Available Cars: {self.available_cars}"
def rent_hourly(self, num_cars):
return self._rent_car(num_cars, "hourly")
def rent_daily(self, num_cars):
return self._rent_car(num_cars, "daily")
def rent_weekly(self, num_cars):
return self._rent_car(num_cars, "weekly")
def return_cars(self, rental_start_time, rental_mode, num_cars):
if rental_mode not in ["hourly", "daily", "weekly"]:
return "Invalid rental mode"
if rental_start_time not in self.rented_cars:
return "Invalid rental start time"
rented_period = datetime.now() - rental_start_time
rented_period_hours = rented_period.total_seconds() / 3600
if rental_mode == "hourly":
bill = 5 * rented_period_hours * num_cars
elif rental_mode == "daily":
bill = 20 * rented_period_hours / 24 * num_cars
elif rental_mode == "weekly":
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PORTS
/usr/local/bin/python3 "/Users/ankitarora/Desktop/Education/PGPDS_Data Science/Caltech/2.Programing Refresher /problem Statements/car rental/car_rental.py"
(base) ankitarora@Ankits-MacBook-Pro car rental % /usr/local/bin/python3 "/Users/ankitarora
/Desktop/Education/PGPDS_Data Science/Caltech/2.Programing Refresher /problem Statements/ca
r rental/car_rental.py"
(base) ankitarora@Ankits-MacBook-Pro car rental %
zsh
Python

customer.py > ...

```python
# customer.py
from car_rental import CarRental

class Customer:
    def __init__(self, name):
        self.name = name

    def request_cars(self, rental, num_cars, rental_mode):
        return rental._rent_car(num_cars, rental_mode)

    def return_cars(self, rental, rental_start_time, rental_mode, num_cars):
        return rental.return_cars(rental_start_time, rental_mode, num_cars)

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
/Desktop/Education/PGPDS_Data Science/Caltech/2.Programing Refresher /problem Statements/ca
r rental/car_rental.py"
(base) ankitarora@Ankits-MacBook-Pro car rental % /usr/local/bin/python3 "/Users/ankitarora/Desktop/Education/PGPDS_Data Science/Caltech/2.Programing Refresher /problem Stateme
nts/car rental/customer.py"
(base) ankitarora@Ankits-MacBook-Pro car rental %
```

zsh
Python

```python
# main.ipynb
from car_rental import CarRental
from customer import Customer

def main():
    total_cars = 10
    rental = CarRental(total_cars)
    customer = Customer("John Doe")

    while True:
        print("1. Display available cars")
        print("2. Rent a car")
        print("3. Return a car")
        print("4. Exit")

        choice = int(input("Enter your choice (1-4): "))

        if choice == 1:
            print(rental.display_available_cars())
        elif choice == 2:
            num_cars = int(input("Enter the number of cars to rent: "))
            rental_mode = input("Enter rental mode (hourly/daily/weekly): ")
            print(customer.request_cars(rental, num_cars, rental_mode))
        elif choice == 3:
            rental_start_time = datetime.strptime(input("Enter rental start time (YYYY-MM-DD HH:MM:SS): "), "%Y-%m-%d %H:%M:%S")
            rental_mode = input("Enter rental mode (hourly/daily/weekly): ")
            num_cars = int(input("Enter the number of cars to return: "))
            print(customer.return_cars(rental, rental_start_time, rental_mode, num_cars))
        elif choice == 4:
            print("Exiting program.")
            break
        else:
            print("Invalid choice. Please enter a number between 1 and 4.")

if __name__ == "__main__":
    main()
```

```
1. Display available cars
2. Rent a car
3. Return a car
4. Exit
Enter your choice (1-4):  2
Enter the number of cars to rent:  3
Enter rental mode (hourly/daily/weekly):  daily
Rented 3 cars for daily mode
1. Display available cars
2. Rent a car
3. Return a car
4. Exit
Enter your choice (1-4):  4
```