CAR MODULE

```
import datetime
import math
class cars:
    confirmation_time=''
    def __init__(self,available_cars):
        self.available_cars=available_cars
    def display_cars(self):
        print('Available no. of cars : ',self.available_cars)
    def duration(self,rental_mode,confirmation_time):
        rental_mode_list=['HOURLY','DAILY','WEEKLY']
        current_time=datetime.datetime.now()
        if (rental_mode.upper()) not in rental_mode_list:
            print('Invalid rental mode')
            return
        if rental_mode.upper()=='HOURLY':
            rental_time=math.ceil((current_time-confirmation_time).total_seconds()/3600)
        if rental_mode.upper()=='DAILY':
            rental_time=math.ceil((current_time-confirmation_time).days)+1
        if rental_mode.upper()=='WEEKLY':
            rental_time=math.ceil((current_time-confirmation_time).days/7)
        return rental_time
    def rent_car(self,no_of_cars,rental_mode,req_time):
        if(no_of_cars>0 and no_of_cars<=self.available_cars):
            self.available_cars=self.available_cars-no_of_cars
            cars.confirmation_time=req_time
            print('Thank you. You have rented {} cars on {} basis',no_of_cars,rental_mode)
        else:
            print('Not enough cars available. Try after some time')
    def bill(self,no_of_cars,rental_mode):
```

```
a=self.duration(rental_mode,cars.confirmation_time)
self.available_cars=self.available_cars+no_of_cars
if rental_mode.upper()=='HOURLY':
    rental_price=a*no_of_cars*50
if rental_mode.upper()=='DAILY':
    rental_price=a*no_of_cars*1000
if rental_mode.upper()=='WEEKLY':
    rental_price=a*no_of_cars*5000
print('Time of Order : ',cars.confirmation_time)
print('Time of Return : ',datetime.datetime.now())
print('Time Duration : ', a)
print('Rental mode : ',rental_mode)
print('No. of cars on rent : ',no_of_cars)
print('Total rent : ', rental_price)
```

CUSTOMER MODULE

```
import datetime
from CarRental import cars
class customers:
    rental_mode=''
    def __init__(self):
        pass
    def request_car(self, car_obj):
        no_of_cars = int(input("How many cars would you like to rent ?"))
        if (no_of_cars>0):
            customers.rental_mode = input("How would you like to rent car - Hourly/Daily/Weekly ?")
            car_obj.rent_car(no_of_cars,customers.rental_mode,datetime.datetime.now())
        else:
            print('Enter valid Number of cars.')
    def return_car(self, car_obj):
        no_of_cars = int(input("How many cars would you like to return ?"))
        car_obj.bill(no_of_cars,customers.rental_mode)
```

MAIN

```
from CarRental import cars
from Customera import customers


def main():
    car_obj=cars(5)
    customer_obj=customers()

    while True:
        print("Welcome to Car Rental System..")
        print("1.Display availble cars")
        print("2.Rent cars")
        print("3.Return cars")
        print("4.Exit")

        choice = int(input("Enter your choice:"))

        if(choice == 1):
            car_obj.display_cars()
        elif(choice == 2):
            customer_obj.request_car(car_obj)
        elif(choice == 3):
            customer_obj.return_car(car_obj)
        elif(choice == 4):
            break
        else:
            print('Invalid Choice. Please enter number between 1-4')

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