

Parking Lot Project

About the project

This project regarding a parking lot with 6 slots

To design a parking lot system with ability to find:

1. Registration numbers of all cars with color.
2. slot number where a particular car is parked.

About the code

The code for this project is written by using python 3.8. So we should have to make sure installed python 3.8 in our pc to run this code.

Description

This repository gives an overview of how we can design a basic parking lot in Python. It creates parking lot with given number of slots. The cars follow Greedy approach while being parked in the slots.

Functions

1. `create_parking_lot n` - Given n number of slots, create a parking lot
2. `park_car regno car_color` - Parks a vehicle with given registration number and color in the nearest empty slot possible. If there are no more empty slots available, it shows a message "Sorry, parking lot is full".
3. `status` - Prints the slot number, registration number and color of the parked vehicles.
4. `leave x` - Removes vehicle from slot number x
5. There are few query functions to retrieve slot number from registration number of car, get registration numbers of cars with particular color etc.

How to run?

This code can be run in two modes

1. **interactive** (We can give required input manually)
2. **File mode**: It can also run by accepting the file which is containing inputs.

Output Screen

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  1: Python  +  □  T

2
Enter your file name
testcase.txt
Created a parking lot with 6 slots
Allocated slot number: 1
Allocated slot number: 2
Allocated slot number: 3
Allocated slot number: 4
Allocated slot number: 5
Allocated slot number: 6
Slot number 4 is free
Slot No.      Registration No.      Colour
1             KA-01-HH-1234          White
2             KA-01-HH-9999          White
3             KA-01-BB-0001          Black
5             KA-01-HH-2701          Blue
6             KA-01-HH-3141          Black

Allocated slot number: 4
Sorry, parking lot is full
KA-01-HH-1234, KA-01-HH-9999, KA-01-P-333
1, 2, 4
6
Not found
```