Project Title: Design a Parking Lot using Python

Introduction:-

Off-street parking is an important part of the transportation system. As it is very difficult to manage and maintain the huge parking lot so there were this project comes in the scenario. This project can keep the record based on the Registration number(Number Plate no.) and the Color of the car.

Dependencies

You just need Python.Visit the link https://www.python.org/downloads/ to install Python.

Motivation:

As in the concrete jungle like in big cities, there is a very inefficient way of parking a car, and sometimes it is very difficult to locate and bring out a car from that place. So the idea is developed to build this project.

Note: In this project manual input as well as file input both are accepted.

For Source Code Visit: https://github.com/attainu/python-project-Sumitroyau9

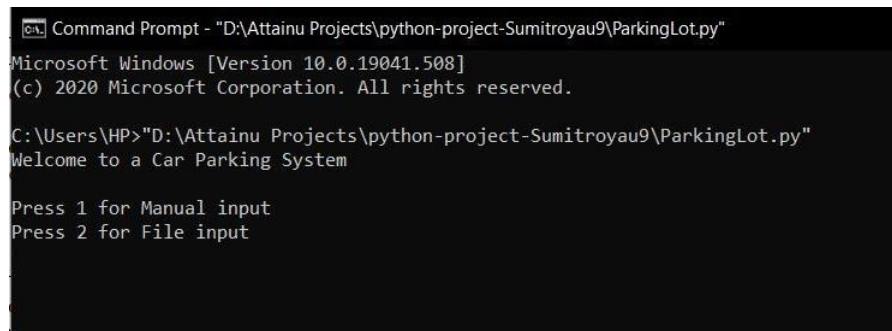## Python Libraries Used:

- Sys

Technology Used:

- Python 3.8

Testcases:

create_parking_lot 6
park KA-01-HH-1234 White
park KA-01-HH-9999 White
park KA-01-BB-0001 Black
park KA-01-HH-7777 Red
park KA-01-HH-2701 Blue
park KA-01-HH-3141 Black
leave 4
status
park KA-01-P-333 White
park DL-12-AA-9999 White
registration_numbers_for_cars_with_colour White
slot_numbers_for_cars_with_colour White

slot_number_for_registration_number KA-01-HH-3141
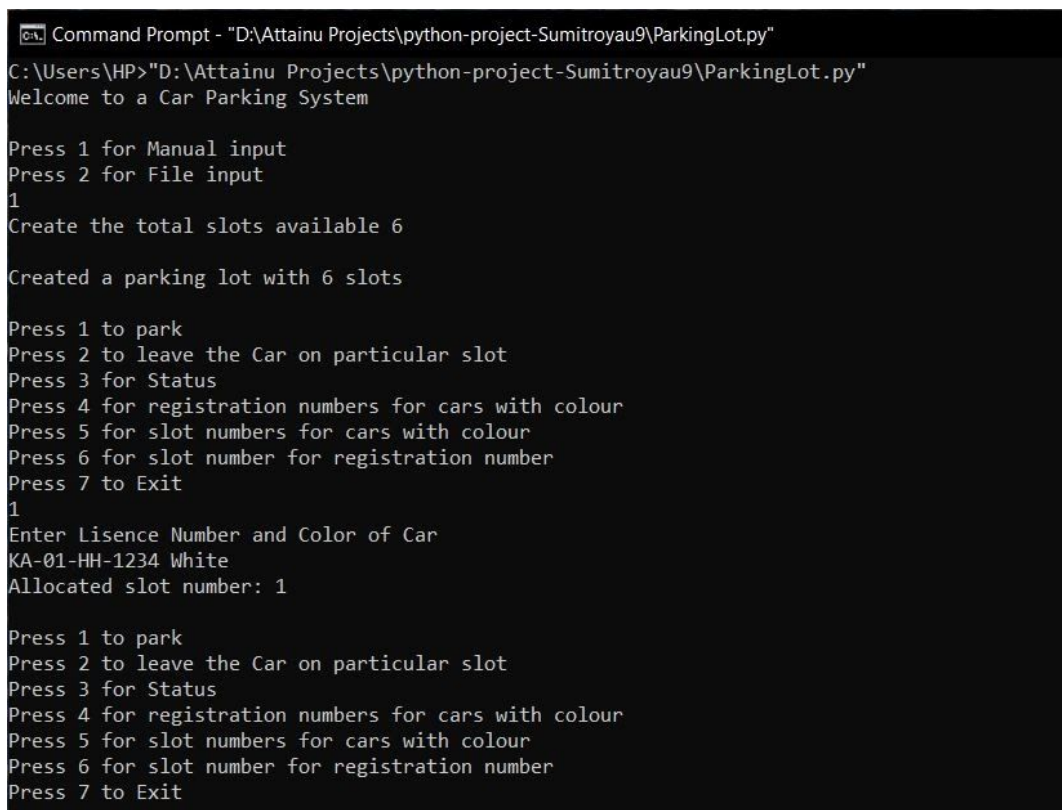slot_number_for_registration_number MH-04-AY-1111

Working of project:-

The above image shows the terminal window where I have given input on my path to python script.Thus it is showing two choices either Manual Input or File Input.

This is how the menu driven program appears when Manual Input is chosen. First of all, no. of total slots has to be created so from the testcase I have taken 6 slots as input. After that program is asking either to park or the remaining task according to the choice no. can be implemented.

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Command Prompt

C:\Users\HP>"D:\Attainu Projects\python-project-Sumitroyau9\ParkingLot.py"
Welcome to a Car Parking System

Press 1 for Manual input
Press 2 for File input
2
Enter your file name
D:\Attainu Projects\python-project-Sumitroyau9\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
```

In this image shows the file input option, where path for the testcase.txt is given.
Then automatically code fetches the input and gives the output.