

# Parking Lot

A python project in which I tried to create parking lot with features like park, leave, get car no with color, etc.

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## Technologies

Project is created with:

- Python 3.8.6

## Setup

To run this project :

1. Clone this repo.
2. Install python
3. run “main.py”
  - \$ python main.py
  - Interactive command prompt based shell is opened, where commands can be typed in.

4. To enter commands as a file, save the commands in a text file within the cloned repo, and give the name of the text file as input in the interactive command prompt based shell.

## Usage

Note : The commands are case sensitive. Please enter the commands mentioned as below.

1. To create a parking lot - **create\_parking\_lot <number of slots>**

```
$ create_parking_lot 6
Created a parking lot with 6 slots
```

2. To park a car - **park <registration number> <colour of car>**

```
$ park KA-01-AA-1234 White
Allocated slot number: 1
```

3. To release a slot - **leave <slot number>**

```
$ leave 4
Slot number 4 is free
```

4. To Query the status of parking lot – **status**

```
$ status
Slot No.      Registration No.      Colour
1             KA-01-AA-1234         White
2             KA-01-BB-0001         Black
3             KA-01-HH-7777         Red
5             KA-01-HH-9999         White
6             KA-01-HH-2701         Blue
```

5. To get registration number of cars with a given color -

**registration\_numbers\_for\_cars\_with\_colour <colour>**

```
$ registration_numbers_for_cars_with_colour White
KA-01-HH-1234, KA-01-HH-9999, KA-01-P-333
```

6. To get slot numbers of cars with a given color -

`slot_numbers_for_cars_with_colour <colour>`

```
$ slot_numbers_for_cars_with_colour White
1, 2, 4
```

7. To get slot number of a car with given registration number -

`slot_number_for_registration_number <registration number>`

```
$ slot_number_for_registration_number KA-01-HH-3141
6
```

8. To input a file in the interactive command prompt based shell - `<file name with extension>`

```
$ test_case.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
```