

```
from abc import ABC, abstractmethod
```

```
class ParkingSpot(ABC):
```

```
    @abstractmethod
```

```
    def park_vehicle(self):
```

```
        pass
```

```
class Sensor:
```

```
    def __init__(self, availability=True):
```

```
        self.__availability = availability
```

```
    def is_available(self):
```

```
        return self.__availability
```

```
    def update_availability(self, status):
```

```
        self.__availability = status
```

```
class CarParking(ParkingSpot):
```

```
    def __init__(self):
```

```
        self.sensor = Sensor(True)
```

```
    def park_vehicle(self):
```

```
        if self.sensor.is_available():
```

```
            print("Car parked successfully.")
```

```
            self.sensor.update_availability(False)
```

```
        else:
```

```
            print("Car parking slot not available.")
```

```
class BikeParking(ParkingSpot):
```

```
    def __init__(self):
```

```
        self.sensor = Sensor(True)
```

```
def park_vehicle(self):  
    if self.sensor.is_available():  
        print("Bike parked successfully.")  
        self.sensor.update_availability(False)  
    else:  
        print("Bike parking slot not available.")
```

```
car_spot = CarParking()
```

```
bike_spot = BikeParking()
```

```
car_spot.park_vehicle()
```

```
car_spot.park_vehicle()
```

```
bike_spot.park_vehicle()
```

```
● PS D:\Internship\Day11> python p1.py  
Car parked successfully.  
Car parking slot not available.  
Bike parked successfully.
```