

# MODERN DATABASES

## ASSIGNMENT-2

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AIML -B (SEM-6)

Self Learning : Develop real-time mini-project.

A "CAR" has the attributes COMPANY\_NAME, MODEL, COLOR, MANUFACTURING\_YEAR and PRICE. A Class is required to be created for "CAR" to store the above attributes and perform the following operations: i) Get the details of "CAR" object from user and store into Array of objects ii) Display the details of "CAR" object based on "COMPANY", "MODEL" and "PRICE".

python file

```
emp c1
File Edit View
import pymongo

class Car:
    def __init__(self, company_name, model, color, manufacturing_year, price):
        self.company_name = company_name
        self.model = model
        self.color = color
        self.manufacturing_year = manufacturing_year
        self.price = price

client = pymongo.MongoClient('mongodb://localhost:27017/')
db = client['car_database']
collection = db['car_collection']

car_list = []
n = int(input("Enter the number of cars: "))
for i in range(n):
    print(f"Enter the details of Car {i+1}: ")
    company_name = input("Company Name: ")
    model = input("Model: ")
    color = input("Color: ")
    manufacturing_year = input("Manufacturing Year: ")
    price = input("Price: ")
    car = Car(company_name, model, color, manufacturing_year, price)
    car_list.append(car)

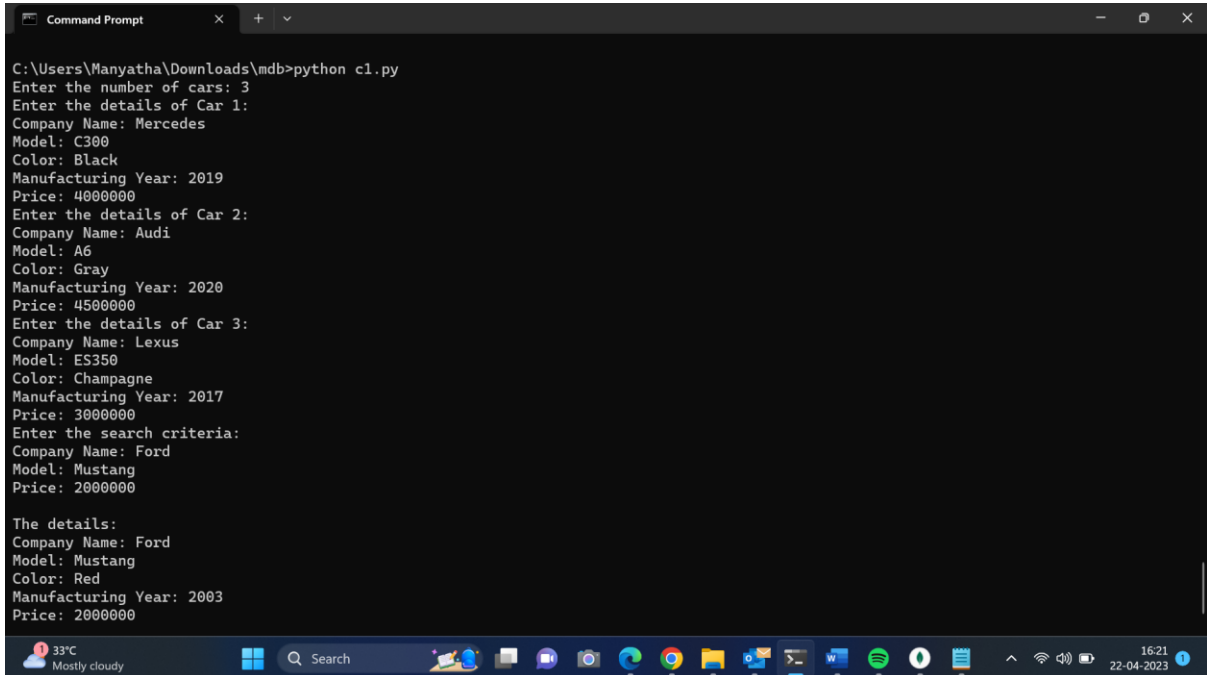
for car in car_list:
    collection.insert_one({
        'company_name': car.company_name,
        'model': car.model,
        'color': car.color,
        'manufacturing_year': car.manufacturing_year,
        'price': car.price
    })

```

```
print("Enter the search criteria:")
company_name = input("Company Name: ")
model = input("Model: ")
price = input("Price: ")
cars = collection.find({
    'company_name': company_name,
    'model': model,
    'price': price
})
for car in cars:
    print(" ")
    print("The details:")
    print(f"Company Name: {car['company_name']}")
    print(f"Model: {car['model']}")
    print(f"Color: {car['color']}")
    print(f"Manufacturing Year: {car['manufacturing_year']}")
    print(f"Price: {car['price']}")

```

## Command prompt



```
C:\Users\Manyatha\Downloads\mdb>python c1.py
Enter the number of cars: 3
Enter the details of Car 1:
Company Name: Mercedes
Model: C300
Color: Black
Manufacturing Year: 2019
Price: 4000000
Enter the details of Car 2:
Company Name: Audi
Model: A6
Color: Gray
Manufacturing Year: 2020
Price: 4500000
Enter the details of Car 3:
Company Name: Lexus
Model: ES350
Color: Champagne
Manufacturing Year: 2017
Price: 3000000
Enter the search criteria:
Company Name: Ford
Model: Mustang
Price: 2000000

The details:
Company Name: Ford
Model: Mustang
Color: Red
Manufacturing Year: 2003
Price: 2000000
```

## MongoDB Compass

