```
class Car:
  def __init__(self, car_id, brand, model, year, price):
     self.car id = car id
     self.brand = brand
     self.model = model
     self.year = year
     self.price = price
  def str (self):
     return f"{self.car id}: {self.brand} {self.model} ({self.year}) - ₹{self.price}"
class CarCatalogSystem:
  def __init__(self):
     self.cars = {}
  def add_car(self, car):
     if car.car id in self.cars:
       print("Car with this ID already exists.")
     else:
       self.cars[car.car id] = car
       print("Car added successfully!")
  def view all cars(self):
     if not self.cars:
       print("No cars available in the catalog.")
     for car in self.cars.values():
       print(car)
  def search_car(self, keyword):
     found = False
     for car in self.cars.values():
       if keyword.lower() in car.brand.lower() or keyword.lower() in car.model.lower():
          print(car)
          found = True
     if not found:
       print("No matching cars found.")
  def update_car(self, car_id, brand=None, model=None, year=None, price=None):
     if car id in self.cars:
       car = self.cars[car_id]
       car.brand = brand or car.brand
       car.model = model or car.model
       car.year = year or car.year
```

```
car.price = price or car.price
       print("Car updated successfully.")
     else:
       print("Car not found.")
  def delete_car(self, car_id):
     if car id in self.cars:
       del self.cars[car_id]
       print("Car deleted successfully.")
     else:
       print("Car not found.")
# Simple command-line interface
def main():
  system = CarCatalogSystem()
  while True:
     print("\n--- Car Catalog System ---")
     print("1. Add Car")
     print("2. View All Cars")
     print("3. Search Car")
     print("4. Update Car")
     print("5. Delete Car")
     print("6. Exit")
     choice = input("Enter your choice: ")
     if choice == '1':
       cid = input("Enter Car ID: ")
       brand = input("Enter Brand: ")
       model = input("Enter Model: ")
       year = input("Enter Year: ")
       price = input("Enter Price: ")
       car = Car(cid, brand, model, year, price)
       system.add_car(car)
     elif choice == '2':
       system.view_all_cars()
     elif choice == '3':
       keyword = input("Enter brand or model to search: ")
       system.search_car(keyword)
```

```
elif choice == '4':
       cid = input("Enter Car ID to update: ")
       print("Leave blank to keep existing value.")
       brand = input("New Brand: ")
       model = input("New Model: ")
       year = input("New Year: ")
       price = input("New Price: ")
       system.update_car(cid,
                   brand if brand else None,
                   model if model else None,
                   year if year else None,
                   price if price else None)
     elif choice == '5':
       cid = input("Enter Car ID to delete: ")
       system.delete_car(cid)
     elif choice == '6':
       print("Exiting...")
       break
     else:
       print("Invalid choice. Please try again.")
if __name__ == "__main__":
  main()
```