import json

CONTACTS\_FILE = "contacts.json"

def load\_contacts():

if not file\_exists(CONTACTS\_FILE):

return []

with open(CONTACTS\_FILE, "r") as file:

return json.load(file)

def save\_contacts(contacts):

with open(CONTACTS\_FILE, "w") as file:

json.dump(contacts, file, indent=2)

def file\_exists(file\_path):

return os.path.exists(file\_path)

def display\_contact(contact):

print(f"\nName: {contact['name']}")

print(f"Phone: {contact['phone']}")

print(f"Email: {contact['email']}")

print(f"Address: {contact['address']}")

def view\_contact\_list(contacts):

print("\n=== Contact List ===")

for index, contact in enumerate(contacts, start=1):

print(f"{index}. {contact['name']} - {contact['phone']}")

def search\_contact(contacts, search\_query):

search\_results = []

for contact in contacts:

if search\_query.lower() in contact["name"].lower() or search\_query in contact["phone"]:

search\_results.append(contact)

return search\_results

def add\_contact(contacts):

print("\n=== Add Contact ===")

name = input("Enter name: ")

phone = input("Enter phone number: ")

email = input("Enter email: ")

address = input("Enter address: ")

new\_contact = {"name": name, "phone": phone, "email": email, "address": address}

contacts.append(new\_contact)

save\_contacts(contacts)

print("Contact added successfully!")

def update\_contact(contacts, contact\_index):

print("\n=== Update Contact ===")

display\_contact(contacts[contact\_index])

contacts[contact\_index]["name"] = input("Enter updated name: ")

contacts[contact\_index]["phone"] = input("Enter updated phone number: ")

contacts[contact\_index]["email"] = input("Enter updated email: ")

contacts[contact\_index]["address"] = input("Enter updated address: ")

save\_contacts(contacts)

print("Contact updated successfully!")

def delete\_contact(contacts, contact\_index):

print("\n=== Delete Contact ===")

display\_contact(contacts[contact\_index])

confirm = input("Do you want to delete this contact? (yes/no): ").lower()

if confirm == "yes":

del contacts[contact\_index]

save\_contacts(contacts)

print("Contact deleted successfully!")

else:

print("Deletion canceled.")

def main():

contacts = load\_contacts()

while True:

print("\n=== Contact Book ===")

print("1. View Contact List")

print("2. Search Contact")

print("3. Add Contact")

print("4. Update Contact")

print("5. Delete Contact")

print("6. Exit")

choice = input("Enter your choice (1-6): ")

if choice == "1":

view\_contact\_list(contacts)

elif choice == "2":

search\_query = input("Enter name or phone number to search: ")

search\_results = search\_contact(contacts, search\_query)

if search\_results:

view\_contact\_list(search\_results)

else:

print("No matching contacts found.")

elif choice == "3":

add\_contact(contacts)

elif choice == "4":

try:

contact\_index = int(input("Enter the index of the contact to update: ")) - 1

if 0 <= contact\_index < len(contacts):

update\_contact(contacts, contact\_index)

else:

print("Invalid index. Please enter a valid index.")

except ValueError:

print("Invalid input. Please enter a number.")

elif choice == "5":

try:

contact\_index = int(input("Enter the index of the contact to delete: ")) - 1

if 0 <= contact\_index < len(contacts):

delete\_contact(contacts, contact\_index)

else:

print("Invalid index. Please enter a valid index.")

except ValueError:

print("Invalid input. Please enter a number.")

elif choice == "6":

print("Exiting the Contact Book. Goodbye!")

break

else:

print("Invalid choice. Please enter a number between 1 and 6.")

if \_\_name\_\_ == "\_\_main\_\_":

main()