**LEVEL – 2**

**Create a console-based contact book that allows users to add, delete, search, and display contacts. Contacts should be stored in a text file.**

import os

# File to store contacts

CONTACTS\_FILE = 'contacts.txt'

# Function to load contacts from the file

def load\_contacts():

if not os.path.exists(CONTACTS\_FILE):

return []

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

contacts = [line.strip() for line in file.readlines()]

return contacts

# Function to save contacts to the file

def save\_contacts(contacts):

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

for contact in contacts:

file.write(contact + '\n')

# Function to display the contact list

def display\_contacts(contacts):

if not contacts:

print("No contacts found.")

else:

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

for idx, contact in enumerate(contacts, 1):

print(f"{idx}. {contact}")

print("\n")

# Function to add a contact

def add\_contact(contacts):

name = input("Enter contact name: ").strip()

phone = input("Enter contact phone number: ").strip()

contact = f"{name} - {phone}"

contacts.append(contact)

save\_contacts(contacts)

print(f"Contact '{name}' added successfully.\n")

# Function to delete a contact

def delete\_contact(contacts):

display\_contacts(contacts)

if contacts:

try:

contact\_number = int(input("Enter the contact number to delete: ")) - 1

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

deleted\_contact = contacts.pop(contact\_number)

save\_contacts(contacts)

print(f"Contact '{deleted\_contact}' deleted successfully.\n")

else:

print("Invalid contact number.\n")

except ValueError:

print("Please enter a valid number.\n")

# Function to search for a contact

def search\_contact(contacts):

search\_term = input("Enter name or phone number to search: ").strip().lower()

found\_contacts = [contact for contact in contacts if search\_term in contact.lower()]

if found\_contacts:

print("\n--- Search Results ---")

for contact in found\_contacts:

print(contact)

print("\n")

else:

print("No contacts found matching that search term.\n")

# Main menu function

def main():

contacts = load\_contacts()

while True:

print("1. Display Contacts")

print("2. Add Contact")

print("3. Delete Contact")

print("4. Search Contact")

print("5. Exit")

choice = input("Enter your choice (1-5): ").strip()

if choice == '1':

display\_contacts(contacts)

elif choice == '2':

add\_contact(contacts)

elif choice == '3':

delete\_contact(contacts)

elif choice == '4':

search\_contact(contacts)

elif choice == '5':

print("Exiting the contact book. Goodbye!")

break

else:

print("Invalid choice, please select a valid option (1-5).\n")

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

main()