TASK 5:- Contact Book

Contact Information: Store name, phone number, email, and address for each contact.

Add Contact: Allow users to add new contacts with their details.

View Contact List: Display a list of all saved contacts with names and phone numbers.

Search Contact: Implement a search function to find contacts by name or phone number.

Update Contact: Enable users to update contact details.

Delete Contact: Provide an option to delete a contact.

User Interface: Design a user-friendly interface for easy interaction.

Ans:-

class Contact:

def \_\_init\_\_(self, name, phone, email, address):

self.name = name

self.phone = phone

self.email = email

self.address = address

class ContactList:

def \_\_init\_\_(self):

self.contacts = []

def add\_contact(self, contact):

self.contacts.append(contact)

def view\_contacts(self):

for contact in self.contacts:

print(f"Name: {contact.name}")

print(f"Phone: {contact.phone}")

print(f"Email: {contact.email}")

print(f"Address: {contact.address}")

print()

def search\_contacts(self, search\_term):

search\_results = []

for contact in self.contacts:

if (

search\_term in contact.name

or search\_term in contact.phone

or search\_term in contact.email

):

search\_results.append(contact)

return search\_results

def update\_contact(self, old\_name, new\_contact):

for contact in self.contacts:

if contact.name == old\_name:

contact.name = new\_contact.name

contact.phone = new\_contact.phone

contact.email = new\_contact.email

contact.address = new\_contact.address

def delete\_contact(self, name):

self.contacts = [contact for contact in self.contacts if contact.name != name]

def main():

contact\_list = ContactList()

while True:

print("Contact Management Application")

print("1. Add Contact")

print("2. View Contact List")

print("3. Search Contact")

print("4. Update Contact")

print("5. Delete Contact")

print("6. Exit")

choice = input("Select an option: ")

if choice == "1":

name = input("Enter Name: ")

phone = input("Enter Phone: ")

email = input("Enter Email: ")

address = input("Enter Address: ")

contact = Contact(name, phone, email, address)

contact\_list.add\_contact(contact)

elif choice == "2":

print("Contact List:")

contact\_list.view\_contacts()

elif choice == "3":

search\_term = input("Enter a name, phone, or email to search: ")

search\_results = contact\_list.search\_contacts(search\_term)

if search\_results:

print("Search Results:")

for contact in search\_results:

print(contact.name)

else:

print("No matching contacts found.")

elif choice == "4":

old\_name = input("Enter the name of the contact to update: ")

new\_name = input("Enter the new name: ")

new\_phone = input("Enter the new phone: ")

new\_email = input("Enter the new email: ")

new\_address = input("Enter the new address: ")

new\_contact = Contact(new\_name, new\_phone, new\_email, new\_address)

contact\_list.update\_contact(old\_name, new\_contact)

print("Contact updated successfully.")

elif choice == "5":

name = input("Enter the name of the contact to delete: ")

contact\_list.delete\_contact(name)

print("Contact deleted successfully.")

elif choice == "6":

break

else:

print("Invalid choice. Please select a valid option.")

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

main()