

## PRACTICAL 5

5	<p>Dictionary-Based Application</p> <p>Build a phonebook application.</p> <ul style="list-style-type: none"><li>• Add new contacts to the dictionary.</li><li>• Search for a contact by name.</li><li>• Update an existing contact's number.</li><li>• Delete a contact.</li><li>• Display all contacts in alphabetical order of names.</li></ul>
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### COMMAND:

'''Dictionary-Based Application

Build a phonebook application.

- Add new contacts to the dictionary.
- Search for a contact by name.
- Update an existing contact's number.
- Delete a contact.
- Display all contacts in alphabetical order of names.'''

# Phonebook Application

phonebook = {} # Empty dictionary to store contacts

def add\_contact():

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

    if name in phonebook:

        print(f'{name} already exists in the phonebook.')

    else:

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

        phonebook[name] = number

        print(f'{name} added successfully.')

## **PRACTICAL 5**

```
def search_contact():  
    name = input("Enter name to search: ").strip().title()  
    if name in phonebook:  
        print(f"{name}'s number is {phonebook[name]}")  
    else:  
        print(f"{name} not found in the phonebook.")  
  
def update_contact():  
    name = input("Enter name to update: ").strip().title()  
    if name in phonebook:  
        number = input(f"Enter new phone number for {name}: ").strip()  
        phonebook[name] = number  
        print(f"{name}'s number updated successfully.")  
    else:  
        print(f"{name} not found in the phonebook.")  
  
def delete_contact():  
    name = input("Enter name to delete: ").strip().title()  
    if name in phonebook:  
        del phonebook[name]  
        print(f"{name} deleted successfully.")  
    else:  
        print(f"{name} not found in the phonebook.")  
  
def display_contacts():  
    if not phonebook:
```

## **PRACTICAL 5**

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    print("Phonebook is empty.")

else:

    print("\nContacts in alphabetical order:")

    for name in sorted(phonebook):

        print(f'{name}: {phonebook[name]}')


# Menu Loop

while True:

    print("\n--- Phonebook Menu ---")

    print("1. Add Contact")

    print("2. Search Contact")

    print("3. Update Contact")

    print("4. Delete Contact")

    print("5. Display All Contacts")

    print("6. Exit")

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

    if choice == '1':

        add_contact()

    elif choice == '2':

        search_contact()

    elif choice == '3':

        update_contact()

    elif choice == '4':

        delete_contact()

    elif choice == '5':
```

## PRACTICAL 5

```
display_contacts()

elif choice == '6':

    print("Exiting Phonebook. Goodbye!")

    break

else:

    print("Invalid choice! Please enter a number from 1 to 6.")
```

### OUTPUT:

```
>>> = RESTART: C:/Users/admin/Documents/PCACS PYTHON/PRACTICAL 5
PYTHON PROGRAMMING FY BSc. COMPUTER SCIENCE-C 1400. KRISHNA
KAMLESH SINGH.py

--- Phonebook Menu ---
1. Add Contact
2. Search Contact
3. Update Contact
4. Delete Contact
5. Display All Contacts
6. Exit
Enter your choice (1-6): 1
Enter name: KRISHNA
Enter phone number: 88505349623
Krishna added successfully.

--- Phonebook Menu ---
1. Add Contact
2. Search Contact
3. Update Contact
4. Delete Contact
5. Display All Contacts
6. Exit
Enter your choice (1-6): 2
Enter name to search: KRISHNA
Krishna's number is 88505349623

--- Phonebook Menu ---
1. Add Contact
2. Search Contact
3. Update Contact
4. Delete Contact
5. Display All Contacts
6. Exit
Enter your choice (1-6): 3
Enter name to update: KRISHNA
Enter new phone number for Krishna: 8850534969
Krishna's number updated successfully.
```

## PRACTICAL 5

```
--- Phonebook Menu ---
1. Add Contact
2. Search Contact
3. Update Contact
4. Delete Contact
5. Display All Contacts
6. Exit
Enter your choice (1-6): 1
Enter name: SEEMA
Enter phone number: 7977956825
Seema added successfully.

--- Phonebook Menu ---
1. Add Contact
2. Search Contact
3. Update Contact
4. Delete Contact
5. Display All Contacts
6. Exit
Enter your choice (1-6): 4
Enter name to delete: KRISHNA
Krishna deleted successfully.

--- Phonebook Menu ---
1. Add Contact
2. Search Contact
3. Update Contact
4. Delete Contact
5. Display All Contacts
6. Exit
Enter your choice (1-6): 5

Contacts in alphabetical order:
Seema: 7977956825

--- Phonebook Menu ---
1. Add Contact
2. Search Contact
3. Update Contact
4. Delete Contact
5. Display All Contacts
6. Exit
Enter your choice (1-6): 6
Exiting Phonebook. Goodbye!
```