# Online Phone Book

Online phonebook where server holds contacts dictionary and a client application connect to access and edit. The server application uses port 13000 and serves only 1 client at a time.

#### Communication Protocol

Displays menu options to client user, takes input for operation, and calls subprotocols. Communication continues until the user terminates the connection, and can continue upon reconnection. **Works as expected.** 

### Phone Adding Subprotocol

Server sends prompts to client application and receives back values for new contact. If the contact name already exists in the dictionary the number is appended to corresponding list, if not a new entry is created. **Works as expected.** 

## Search Subprotocol

Server sends client prompt for search term and receives back a string. Server matches the search term against all names and numbers in the contact dictionary and returns a formatted string of all matching contacts to the client. **Works as expected.** 

# Sample Outputs

#### \$ python3 client.py

Enter the server name or IP address: Welcome to the online phone book.

Please select the operation

- 1)Add a new entry
- 2)Search
- 3)Terminate the connection

Choice: 1

Enter Name: ABC DEF Enter Number: 77777777 Please select the operation

1)Add a new entry

2)Search

3)Terminate the connection

Choice: 1

Enter Name: ABC DEF Enter Number: 888888 Please select the operation

1)Add a new entry

2)Search

3)Terminate the connection

Choice: 1

Enter Name: ABC FGH Enter Number: 0000000 Please select the operation

1)Add a new entry

2)Search

3)Terminate the connection

Choice: 1

Enter Name: LMN OPQ Enter Number: 44444444 Please select the operation

1)Add a new entry

2)Search

3)Terminate the connection

Choice: 1

Enter Name: ABC

1)Add a new entry

2)Search

3)Terminate the connection

Choice: 2

Enter the Search Word: ABC

Name: PhoneNumber(s):
ABC DEF ['7777777', '888888']

ABC FGH ['0000000'] ABC ['333333333']

Please select the operation

- 1)Add a new entry
- 2)Search
- 3)Terminate the connection

Choice: 3

**Connection Terminated** 

#### \$ python3 client.py

Enter the server name or IP address: Welcome to the online phone book.

Please select the operation

- 1)Add a new entry
- 2)Search
- 3)Terminate the connection

Choice: 2

Enter the Search Word: ABC

Name: PhoneNumber(s):
ABC DEF ['7777777', '888888']

ABC FGH ['0000000'] ABC ['333333333']

Please select the operation

- 1)Add a new entry
- 2)Search
- 3)Terminate the connection

Choice: 2

Enter the Search Word: FGH

Name: PhoneNumber(s):

ABC FGH ['0000000']

Please select the operation

- 1)Add a new entry
- 2)Search
- 3)Terminate the connection

Choice: 3

**Connection Terminated**