**Pseudo code**

Below is the pseudo code of the functions that we will be making use of in phonebook software.

**1. Add contact**

Contact[ ] Contacts = new Contact[50]

Int contactCount = 0

Function InsertContact( ):

prompt user for name, phone

get name, phone

if contactCount >= 50

print “ Phonebook is full”

Return

Else

Contacts[ contactCount ] = new Contact( name, phone)

contactCount = contactCount + 1

Print “ Contact is added ”

EndFunction

**2. Search contact**

Function SearchContact( ):

Prompt user for name

Get name

For i = 0 to contactCount - 1

If Contacts[i].name == name

Return Contacts[i].phone

Else

Print “ Contact not found”

Return NULL

EndFor

EndFunction

**3. Display contacts**

Function displayContacts( ):

For i = 0 to contactCount – 1

Print “ Name: “, Contacts[i].name, “phone: “, Contacts[i].phone

EndFor

EndFunction

**4. Delete contact**

Function DeleteContact(name):

for i = 0 to contactCount - 1

if contacts[i].name == name

for j = i to contactCount - 2

contacts[j] = contacts[j + 1]

contactCount = contactCount - 1

print "Contact deleted"

Return

print "Contact not found"

EndFunction

**5. Update contact**

Function UpdateContact(name, newPhone):

for i = 0 to contactCount - 1

if contacts[i].name == name

contacts[i].phone = newPhone

print "Contact updated"

Return

print "Contact not found"

EndFunction

**6. Sort contacts**

Function SortContacts():

for i = 0 to contactCount - 2

for j = 0 to contactCount - 2 - i

if contacts[j].name > contacts[j + 1].name

hold = contacts[j]

contacts[j] = contacts[j + 1]

contacts[j + 1] = hold

print "Contacts sorted"

EndFunction