Pseudocode

PHONEBOOK = [] WHILE TRUE DISPLAY MENU: 1. INSERT CONTACT 2. SEARCH CONTACT 3. DISPLAY ALL CONTACTS 4. DELETE CONTACT 5. UPDATE CONTACT 6. EXIT PROMPT USER TO "CHOOSE AN OPTION: " GET USER_CHOICE IF USER_CHOICE == 1 THEN PROMPT USER TO "ENTER NAME: " **GET NAME** PROMPT USER TO "ENTER PHONE NUMBER: " GET PHONE_NUMBER PROMPT USER TO "ENTER EMAIL: " **GET EMAIL** CREATE NEW CONTACT WITH NAME, PHONE_NUMBER, AND EMAIL ADD NEW CONTACT TO PHONEBOOK PRINT "CONTACT ADDED!" ELSE IF USER_CHOICE == 2 THEN PROMPT USER TO "ENTER NAME OR PHONE NUMBER TO SEARCH: " GET SEARCH_QUERY SEARCH FOR CONTACT IN PHONEBOOK WHERE NAME OR PHONE_NUMBER MATCHES SEARCH_QUERY IF CONTACT IS FOUND THEN PRINT CONTACT DETAILS ELSE

PRINT "CONTACT NOT FOUND."

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ELSE IF USER_CHOICE == 3 THEN
   IF PHONEBOOK IS EMPTY THEN
     PRINT "PHONEBOOK IS EMPTY."
   ELSE
     FOR EACH CONTACT IN PHONEBOOK
       PRINT CONTACT DETAILS
     END FOR
 ELSE IF USER_CHOICE == 4 THEN
   PROMPT USER TO "ENTER NAME OR PHONE NUMBER TO DELETE: "
   GET DELETE_QUERY
   SEARCH FOR CONTACT IN PHONEBOOK WHERE NAME OR PHONE_NUMBER MATCHES DELETE_QUERY
   IF CONTACT IS FOUND THEN
REMOVE CONTACT FROM PHONEBOOK
     PRINT "CONTACT DELETED."
   ELSE
     PRINT "CONTACT NOT FOUND."
 ELSE IF USER CHOICE == 5 THEN
   PROMPT USER TO "ENTER NAME OR PHONE NUMBER TO UPDATE: "
   GET UPDATE_QUERY
   PROMPT USER TO "ENTER NEW NAME: "
   GET NEW_NAME
   PROMPT USER TO "ENTER NEW PHONE NUMBER: "
   GET NEW_PHONE_NUMBER
   PROMPT USER TO "ENTER NEW EMAIL: "
   GET NEW_EMAIL
   SEARCH FOR CONTACT IN PHONEBOOK WHERE NAME OR PHONE_NUMBER MATCHES UPDATE_QUERY
   IF CONTACT IS FOUND THEN
     {\tt UPDATE\ CONTACT\ DETAILS\ WITH\ NEW\_NAME,\ NEW\_PHONE\_NUMBER,\ AND\ NEW\_EMAIL}
     PRINT "CONTACT UPDATED."
   ELSE
     PRINT "CONTACT NOT FOUND."
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ELSE IF USER_CHOICE == 6THEN

PRINT "EXITING."

BREAK

ELSE

PRINT "INVALID CHOICE. TRY AGAIN."

END WHILE

<u>Flowchart</u>

