Search Contact Linear Search

FUNCTION searchContactsByName(name) RETURNS LinkedList

START

   LinkedList results = NEW LinkedList()

   INTEGER count = 0

   // Check if the list is empty

   IF isEmpty() THEN

      DISPLAY message "The list is empty." with title "No contacts"

      RETURN NULL

   END IF

   // Traverse the linked list

   Node temp = this.head

   WHILE temp IS NOT NULL DO

      // Check if the first or last name matches

      IF temp.contact.getFirstName() EQUALS name OR

        temp.contact.getLastName() EQUALS name THEN

        // Display the contact's details

        textArea.setText(temp.contact.toString())

        // Insert contact into results

        results.insertContact(temp.contact)

      END IF

      // Move to the next node

      temp = temp.next

      count = count + 1

   END WHILE

```
    // Return the list of matching contacts

    RETURN results

END FUNCTION
```