PSUDO CODE AND FLOWCHART - LINKED-LIST PROGRAM

LinkedList PSUDOCODE:

```
while (choice != 4):
    Display menu options
    Read choice from user

    if choice == 1:
        Read data from user
        Create a new node with the data

        if list is empty:
            Set the new node as the head of the list
        else:
            Find the last node in the list
            Set the next pointer of the last node to the new node

    else if choice == 2:
        if list is empty:
            Display "List is empty"
        else:
            Find the second last node in the list
            Set the next pointer of the second last node to null

    else if choice == 3:
        if list is empty:
            Display "List is empty"
        else:
            Initialize currentNode as the head of the list
            while currentNode is not null:
                Display the data in currentNode
                Move to the next node

    else if choice == 4:
        Exit the program

    else:
        Display "Invalid choice"

End of loop
```

FLOWCHART:

```
+-----------------+
|  Start Program  |
+-----------------+
         |
         V
  +---------------+
  | Display Menu  |
  +---------------+
         |
         V
  +--------------+
  | Read Choice  |
  +--------------+
         |
         V
  +--------------+
  |  Choice = 1  |
  +--------------+
         |
         V
  +---------------+
  | Read Data     |
  +---------------+
         |
         V
  +---------------+
  | Create Node   |
  +---------------+
         |
         V
  +--------------+
  | List Empty?  |
  +--------------+
  |     |      |
  |     V      |
  | Set Node as |
  |   Head      |
  |     |      |
  |     V      |
  +----->+<------+
         |
         V
  +--------------+
  | Find Last    |
  |  Node        |
  +--------------+
         |
         V
  +-----------------+
  | Set Next Pointer|
  |  to New Node    |
  +-----------------+
```

```
            |
            V
   +--------------+
   | Choice = 2   |
   +--------------+
            |
            V
   +---------------+
   | List Empty?   |
   +---------------+
   |        |      |
   |        V      |
   | Delete Last   |
   |   Element     |
   |        |      |
   |        V      |
   +----->+<-------+
            |
            V
   +--------------+
   |  Choice = 3  |
   +--------------+
            |
            V
   +----------------+
   | List Empty?    |
   +----------------+
   |        |       |
   |        V       |
   | Display List   |
   |        |       |
   |        V       |
   +------>+<-------+
            |
            V
   +-------------+
   |  Choice = 4 |
   +-------------+
            |
            V
   +----------------+
   |   End Program  |
   +----------------+
```