Linked Lists

A linked list is a linear data structure where each element is a separate object, called a node. Each node holds its own data and the address of the next node, thus forming a chain-like structure.

A simple node in a linked list can be represented in C++ as follows:

```cpp
struct Node {
    int data;
    Node* next;
};
```

In this structure, 'data' is used to store the data and 'next' is a pointer that holds the address of the next Node in the list.

Here is a simple example of creating and linking nodes in a linked list:

```cpp
// Create nodes
Node* head = new Node();
Node* second = new Node();
Node* third = new Node();
```

```cpp
// Assign data
head->data = 1;
second->data = 2;
third->data = 3;

// Link nodes
head->next = second;
second->next = third;
third->next = nullptr;   // The last node points to null
```

In this example, we first create three nodes using the 'new' keyword, which dynamically allocates memory. We then assign data to the nodes and link them using the 'next' pointer.

Answers to Exercises

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