

1. What would the following member function do if it were added to the author's `LinkedList` class?

```
template <class E>
E LinkedList<E>::mystery()
{
    node *nodePtr;
    first();

    for (nodePtr = myFirst; nodePtr; nodePtr = nodePtr->next)
    {
        next();
    }

    return myPrevious->data;
}
```

2. Rewrite the member function `mystery` so that it uses an indeterminate loop.

3. Assume that a linked list (based on the author's `LinkedList` class) contains nodes whose data members are sorted in ascending order. Write a new member function named `insertInOrder` that accepts a data element as a parameter and that inserts a new node that contains this data value so that the linked list is maintained in alphabetical order. You may assume that the comparison operators (`<`, `>`, etc.) can be used with the data elements of the list. Be sure to test your solution thoroughly with various test cases.