

16.216: ECE Application Programming

Fall 2014

Lecture 36: Key Questions
December 8, 2014

1. Describe how to maintain a sorted linked list.

2. Write each of the following functions:
 - a. Adding an item to a sorted linked list
 - Use **addNode()** as a starting point
 - Instead of adding node at beginning, find appropriate place in list and then add
 - Function should return pointer to start of list after it has been modified

```
LLnode *addSortedNode(LLnode *list, int v) {
```

```
}
```

- b. Finding an item in a sorted linked list
- Use **findNode()** as starting point—should perform same operation, but more efficiently
 - Function should return pointer to node if found
 - Return NULL otherwise

```
LLnode *findSortedNode(LLnode *list, int v) {
```

```
}
```