Announcements

- A3 will be available on Piazza tomorrow. Refer often to the Piazza FAQ Note for A3.
- Please read the assignment A3 FAQ Notes on the Piazza before asking a question. It might already be answered.

Assignment A3: Linked Lists

Idea: maintain a list (2, 5, 7) like this:

This is a singly linked list

To save space, we write names like a6 instead of N@35abcd00

Assignment A3: Generics

```
public class LinkedList {
    void add(Object elem) {...}
    Object get(int index) {...}
}
```

Values of linked list are of class Object

```
public class LinkedList<E> {
    void add(E elem) {...}
    E get(int index) {...}
}
```

You can specify what type of values

```
ns = new LinkedList<Integer>();
ns.add("Hello"); // error
ns.add(5);
```

```
ss = new LinkedList<String>();
ss.add("Hello");
ss.add(5); // error
String s = ss.get(0); // error
```

```
int n = ns.get(0); // error
int n = ss.get(0); // error
```

How to insert a node at the beginning

```
(2, 5, 7)
```

```
(8, 2, 5, 7)
```

How to remove successor of a node in the middle

```
(2, 5, 8, 7)
```

```
(2, 5, 7)
```