Data Sstructures and Algorithms

Agenda

- Linked List Interview Questions
- HashTable

Q & A

Linked List -- Swapping Nodes

```
head --> 10 --> 20 --> 30 --> 40 --> 50 --> 60 -->
         pi      i                pj      j
```

```Java
// swap "i" node with "j" node
Node t = i.next;
i.next = j.next;
j.next = t;

t = pi.next;
pi.next = pj.next;
pj.next = t;
```

Linked List -- Bubble Sort (Swapping Data)

```
for(i=head; i.next != null; i=i.next) {
    for(j=head; j.next != null; j=j.next) {
        Node j1 = j.next;
        if(j.data > j1.data) {
            int t = j.data;
            j.data = j1.data;
            j1.data = t;
        }
    }
}
```

Linked List -- Bubble Sort (Swapping Nodes)

```
for(i=head; i.next != null; i=i.next) {
    for(j=head; j.next != null; j=j.next) {
        Node j1 = j.next;
        if(j.data > j1.data) {
            // refer slides
        }
    }
}
```