

Northern Michigan University (Marquette Co, MI)

CS345-01-23W: Android Programming (Andrew A. Poe)
Quiz 3

Name: _____
Friday 10 February 2023 1:00 P.M. EST

Time: 15 minutes

Given the Kotlin class definitions below for a linked list and a linked list node:

```
class LL {  
    var head:LLN? = null  
}  
  
class LLN (i:Int,n:LLN?) {  
    var num = i  
    var next = n  
}
```

Write code for the Largest() methods in LL and LLN. If I have a linked list declared as:

```
var list = LL()
```

list.Largest() should cause the largest number in the list to be returned (not printed).

Do not use loops; use recursion only.

```
LL:  
fun Largest():Int {  
  
    if (head==null) return 0  
    return head!!.Largest()  
}  
  
LLN:  
fun Largest():Int {  
  
    if (next==null) return num  
    val lg = next!!.Largest()  
    if (num > lg) return num  
    return lg  
}
```