

104 HW #1

4. a)  $in1 = [1, 2, 3, 4]$   $in2 = [5, 6]$

$llrec(\{1, 2, 3, 4\}, \{5, 6\})$

$\hookrightarrow in1 \rightarrow next = llrec(\{5, 6\}, \{2, 3, 4\})$   
 $\underbrace{\quad}_1$

$\hookrightarrow in1 \rightarrow next = llrec(\{2, 3, 4\}, \{6\})$   
 $\underbrace{\quad}_5$

$\hookrightarrow in1 \rightarrow next = llrec(\{6\}, \{3, 4\})$   
 $\underbrace{\quad}_2$

$\hookrightarrow in1 \rightarrow next = llrec(\{3, 4\}, NULL)$   
 $\underbrace{\quad}_6 \quad \hookrightarrow \{3 \rightarrow 4\}$

$\hookrightarrow$  Recurse back

$\boxed{1 \rightarrow 5 \rightarrow 2 \rightarrow 6 \rightarrow 3 \rightarrow 4}$

b) Run1:  $llrec(NULLptr, 2)$

$\hookrightarrow \boxed{2}$