4.

a) (in 1) $\boxed{1} \to \boxed{2} \to \boxed{3} \to \boxed{4}$ NULLPTR (in 2) $\boxed{5} \to \boxed{6}$ NULLPTR

$\boxed{1} \to$ llrec (in2, p2)

llrec ($\overset{p5}{(5,6)}$, $\overset{p2}{(2,3,4)}$)

$\boxed{5} \to$ llrec ($\overset{p2}{(2,3,4)}$, $\overset{p6}{(6)}$)

$\boxed{2} \to$ llrec ($\overset{p6}{(6)}$, $\overset{p3}{(3,4)}$)

$\boxed{6} \to$ llrec ($\overset{p3}{(3,4)}$, (NULLPTR))

return (3, 4)

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

b) (in 1) NULLPTR   (in 2) $\boxed{2}$ NULLPTR

return in 2

$\boxed{2}$