

Reagan Landis

CS 104

HW 1

Problem 4 Answers

4a) `llrec(1, 5)`

↳ `in1 = 1, in2 = 5, in1 → next = 2`

`llrec(5, 2)`

↳ `in1 = 5, in2 = 2, in1 → next = 6`

`llrec(2, 6)`

↳ `in1 = 2, in2 = 6, in1 → next = 3`

`llrec(6, 3)`

↳ `in1 = 6, in2 = 3, in1 → next = NULL`

`llrec(3, NULL)`

↳ `in1 = 3, in2 = NULL, in1 → next = 4`

`return in1 (return 3)`

`in1 → next = 3`

`return in1 (return 6)`

`in1 → next = 6`

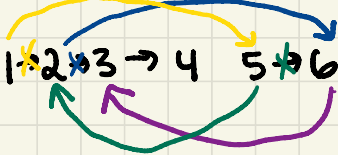
`return in1 (return 2)`

`in1 → next = 2`

`return in1 (return 5)`

`in1 → next = 5`

`return 1`



Returns 1 5 2 6 3 4

4b) In this case, `in1` is null, so the first if statement immediately executes and returns `in2`. As stated in the question, `in2 = 2`. Thus, `in2 = 2` is the linked list that is returned.