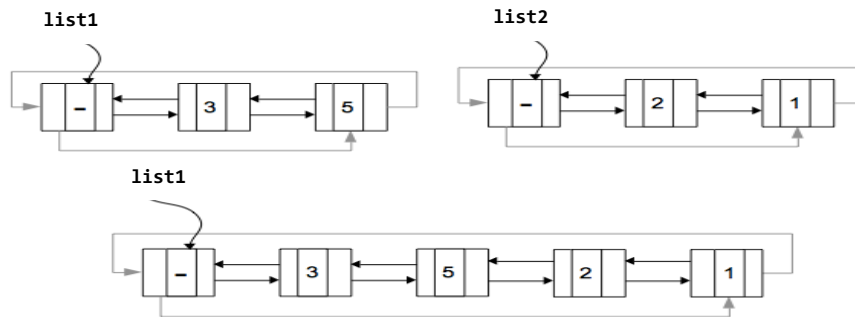


## QUIZ #9

Fill in the four blanks with the numbers of corresponding code lines in the table to complete the method that concatenates two circular doubly linked lists by removing the header node of the second linked list (see the figures below).



1	<code>list2-&gt;prev-&gt;next = list1-&gt;next</code>	5	<code>list2-&gt;next-&gt;prev = list1-&gt;prev</code>
2	<code>list2-&gt;next != list2</code>	6	<code>list2-&gt;next != list2-&gt;prev</code>
3	<code>list1-&gt;prev-&gt;next = list2-&gt;next</code>	7	<code>list1-&gt;next-&gt;prev = list2-&gt;next</code>
4	<code>list2 = list1-&gt;next-&gt;prev</code>	8	<code>list2-&gt;prev-&gt;next = list1</code>

```

typedef struct node{
    int x;
    struct node *prev; //previous link
    struct node *next; //next link
}node;

struct node* concatLists(struct node* list1, struct node* list2)
{
    if (list2->next != list2) { // 2

        list1->prev->next = list2->next; // 3
        list2->next->prev = list1->prev; // 5
        list1->prev = list2->prev;
        list2->prev->next = list1; // 8

    }

    free(list2);
    return list1;
}

```

Correct answers:

2-3-5-8

2-5-3-8