Q1. Below is **pseudocode** to **populate a singly linked list** with the following **5 letters** in the given order:

a → b → c → d → e → NULL

```
Populate_List()
    head ← NULL
    letters ← ['a', 'b', 'c', 'd', 'e']

    for each ch in letters do
        new_node ← allocate memory
        new_node.data ← ch
        new_node.next ← NULL

        if head = NULL
            head ← new_node
        else
            current ← head
            while current.next ≠ NULL do
                current ← current.next
            current.next ← new_node

    return head
```

Now Write **pseudocode** to:

a. **Find the node with key 'c' (2 Marks)**

Move_C_To_End(head)

if head = NULL OR head.next = NULL

return head

prev ← NULL

current ← head

Solution For a:

while current ≠ NULL AND current.data ≠ 'c' do 0.5 mark for for loop

prev ← current 0.5 mark for this line

current ← current.next 0.5 mark for this line

if current = NULL

return head // 'c' not found 0.5 mark for this condition

b. **Remove that node from its current position (4 Marks)**

Solution For b:

if prev = NULL 0.5 mark for this condition

head ← current.next // 'c' is head 0.5 mark for this line

else

prev.next ← current.next 3 mark for rest

⚠️ **Important constraint**:
You must **not create a new node**.
The **memory address of node 'c' must remain the same**.