



Quiz-1 (solution)

CLO-1 (Employ linear data structures to solve computing problems.)

1- Write pseudocode to insert a node with value 25 after 20.

```
Function insertAfter(head, value, newValue):  
    node = head  
    While node is not NULL:  
        If node.data == value:  
            newNode = createNode(newValue)  
            newNode.next = node.next  
            node.next = newNode  
            Return head  
        node = node.next  
    Return head
```

2- Write pseudocode to delete the node 40.

```
Function deleteNode(head, value):  
    If head == NULL:  
        Return head  
  
    If head.data == value:  
        head = head.next  
        Return head  
  
    node = head  
    While node.next is not NULL:  
        If node.next.data == value:  
            node.next = node.next.next  
            Return head  
        node = node.next  
  
    Return head
```

3- Write pseudocode to search for the value 30 and return its position.

```
Function searchNode(head, value):  
    position = 1  
    node = head  
  
    While node is not NULL:  
        If node.data == value:  
            Return position  
        node = node.next  
        position = position + 1
```



COMSATS University Islamabad, Attock Campus

Department of Computer Science

Return -1 // If value not found